

COMMITTEE ROOM



Lloyd's Register

Marine Technical Library
London

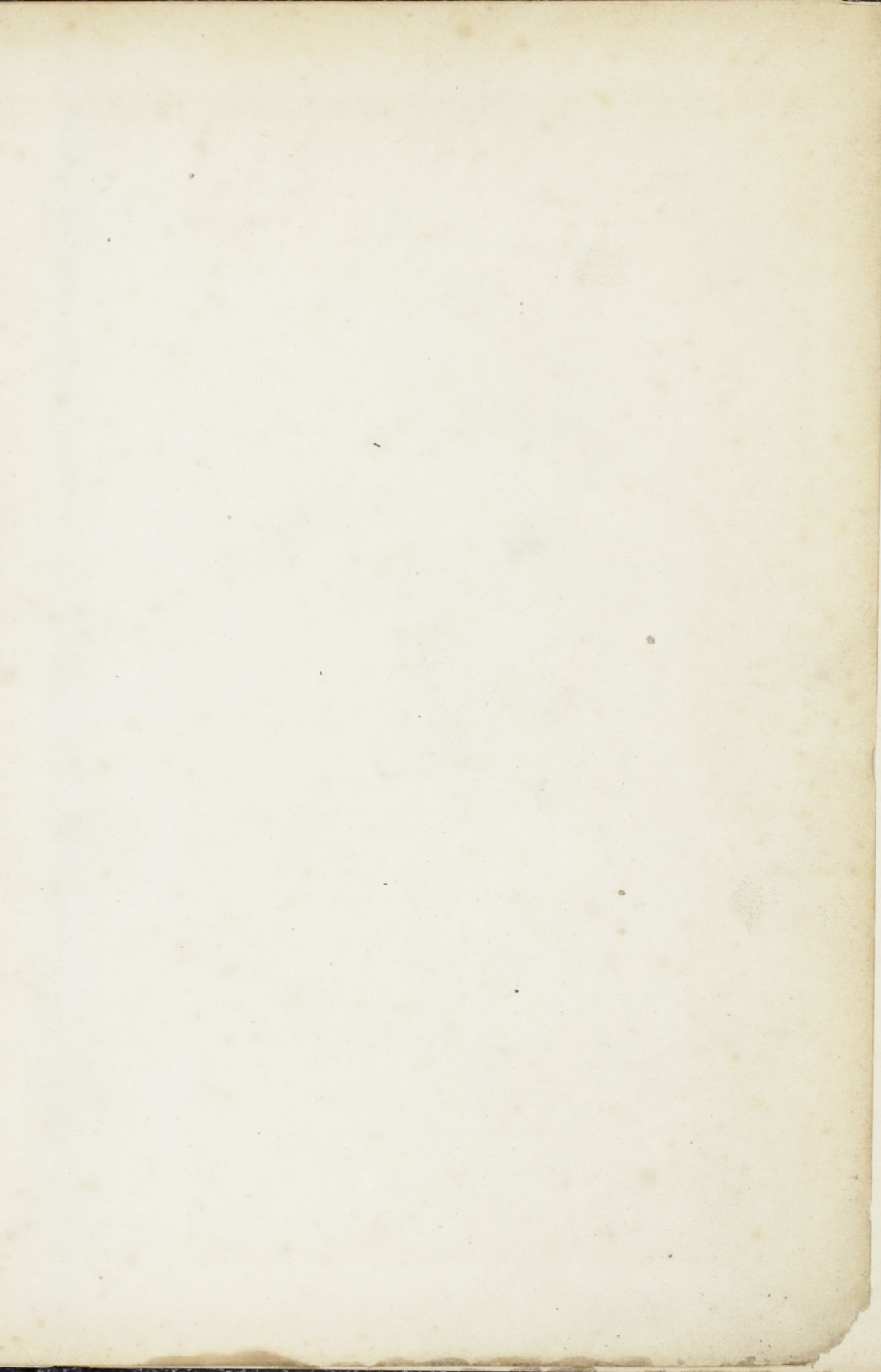
Marine Data Systems

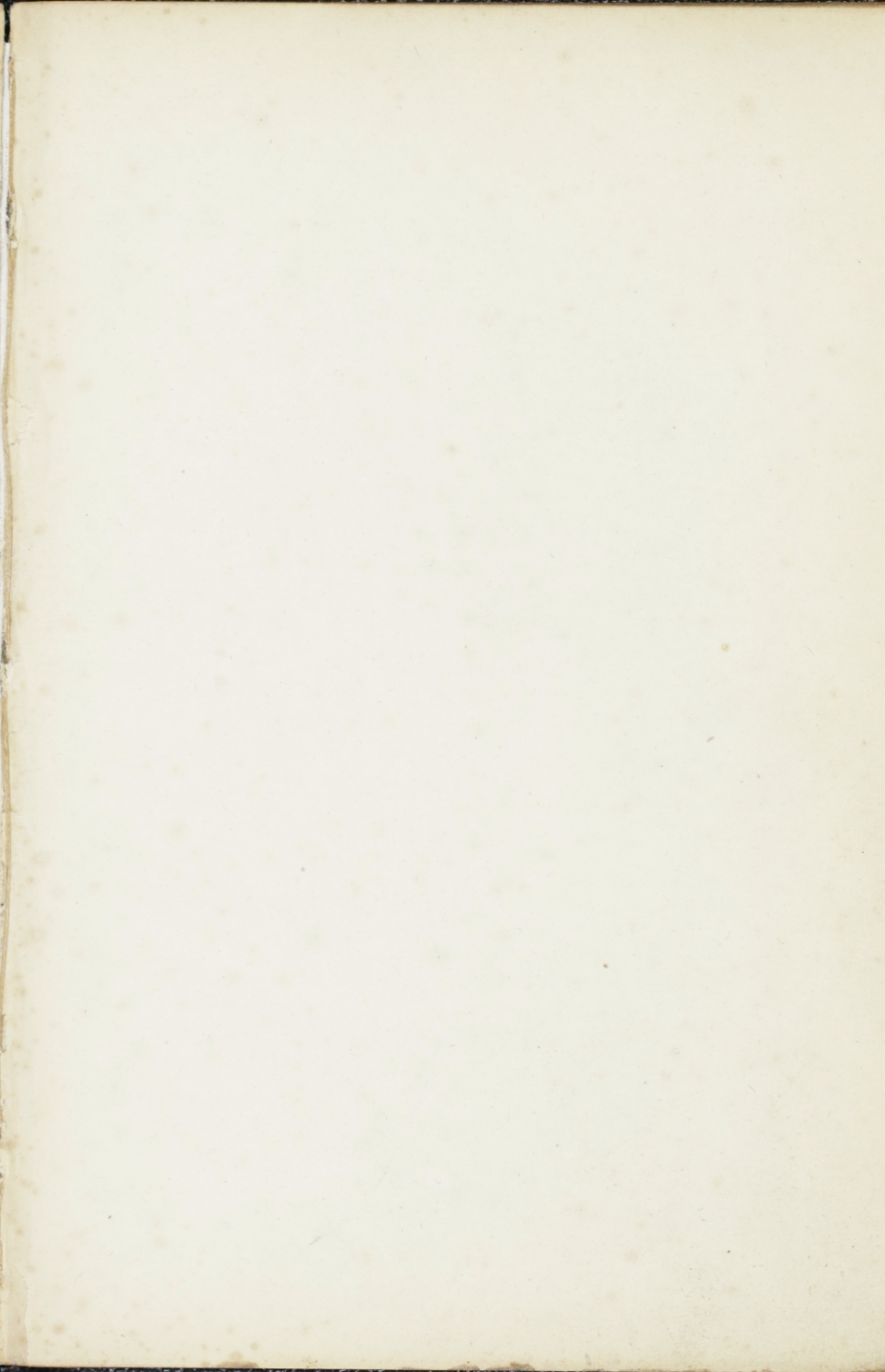
Date

14/12/04

18931 Catalogues







LOYD'S REGISTER

OF SHIPS AND TONNAGE

SHIPPING.

LEADING REGISTER

OF THE
SHIPPING AND FOREIGN

SHIPPING

LLOYD'S REGISTER
OF
BRITISH AND FOREIGN
SHIPPING.

LLOYD'S REGISTER
OF
BRITISH AND FOREIGN
SHIPPING.

From 1st JULY, 1849, to the 30th JUNE, 1850.

ESTABLISHED 1834.



LONDON:

PRINTED BY J. & H. COX, BROTHERS, (LATE COX & SONS,) 74 & 75, GREAT QUEEN STREET, LINCOLN'S-INN FIELDS.

1849.

COMMITTEE OF INVESTIGATION

1913-1914

MEMBERS OF THE COMMITTEE

- John Harrison, Rep., Chairman of the Committee
George A. Allen, Rep.
Henry B. Clark, Rep.
James S. Cramer, Rep.
George D. Eastman, Rep.
George H. Fox, Rep.
George F. Johnson, Rep.
George L. Johnson, Rep.
George M. Johnson, Rep.
George N. Johnson, Rep.
George O. Johnson, Rep.
George P. Johnson, Rep.
George Q. Johnson, Rep.
George R. Johnson, Rep.
George S. Johnson, Rep.
George T. Johnson, Rep.
George U. Johnson, Rep.
George V. Johnson, Rep.
George W. Johnson, Rep.
George X. Johnson, Rep.
George Y. Johnson, Rep.
George Z. Johnson, Rep.



George A. Allen, Rep.
George B. Allen, Rep.
George C. Allen, Rep.
George D. Allen, Rep.
George E. Allen, Rep.
George F. Allen, Rep.
George G. Allen, Rep.
George H. Allen, Rep.
George I. Allen, Rep.
George J. Allen, Rep.
George K. Allen, Rep.
George L. Allen, Rep.
George M. Allen, Rep.
George N. Allen, Rep.
George O. Allen, Rep.
George P. Allen, Rep.
George Q. Allen, Rep.
George R. Allen, Rep.
George S. Allen, Rep.
George T. Allen, Rep.
George U. Allen, Rep.
George V. Allen, Rep.
George W. Allen, Rep.
George X. Allen, Rep.
George Y. Allen, Rep.
George Z. Allen, Rep.

Committee of Management.

1849—1850.

THOMAS CHAPMAN, Esq., F.R.S. F.S.A. *Chairman.*

WILLIAM TINDALL, Esq., *Deputy Chairman.*

JOHN ROBINSON, Esq., *Chairman of the Sub-Committees of Classification.*

GEORGE ALLFREY, Esq.

ROBERT BARRY, Esq.

HENRY BUCKLE, Esq.

JOSEPH B. CHAPMAN, Esq.

GEORGE DENNY, Esq.

DUNCAN DUNBAR, Esq.

STEPHENSON ELLERBY, Esq.

GEORGE FENNING, Esq.

NATHANIEL GOULD, Esq., F.S.A.

GEORGE HANKEY, Esq.

GEORGE HANSON, Esq.

WILLIAM C. HARNETT, Esq.

JOHN B. HEATH, Esq., F.R.S.

J. L. HEATHORN, Esq.

EDWARD HURRY, Esq.

ALEXANDER NAIRNE, Esq.

JOHN POOLE, Esq.

THOMAS O. POWLES, Esq.

ANTHONY RIDLEY, Esq.

WM. WILSON SAUNDERS, Esq.

GEORGE WHITMORE, Esq.

GEORGE R. ROBINSON, Esq., M.P., *Chairman of the Committee of Lloyd's.*

GEORGE F. YOUNG, Esq., *Chairman of the General Ship-Owners' Society.*

ALSO

THE CHAIRMAN OF THE LIVERPOOL COMMITTEE.

THE DEPUTY-CHAIRMAN

DITTO.

THE CHAIRMAN OF THE ROTATION COMMITTEES, DITTO.

Trustees.

GEORGE ALLFREY, Esq.

THOMAS CHAPMAN, Esq.

NATHANIEL GOULD, Esq.

GEORGE HANSON, Esq.

JOHN ROBINSON, Esq.

WILLIAM TINDALL, Esq.

Bankers.

BANK OF ENGLAND.

Solicitor.

THOMAS OLIVERSON, Esq., FREDERICK'S PLACE, OLD JEWRY.

Secretary and Registrar.

CHARLES GRAHAM, Esq. F.S.A.

Principal Shipwright Surbeyor.

AUGUSTIN F. B. CREUZE, Esq., F.R.S.

No. 2, White Lion Court, Cornhill,
London, 1st July, 1849.

INDEX

RULES AND REGULATIONS

1840-50

1	1840-50
2	1850-60
3	1860-70
4	1870-80
5	1880-90
6	1890-1900
7	1900-1910
8	1910-1920
9	1920-1930
10	1930-1940
11	1940-1950
12	1950-1960
13	1960-1970
14	1970-1980
15	1980-1990
16	1990-2000
17	2000-2010
18	2010-2020
19	2020-2030
20	2030-2040
21	2040-2050
22	2050-2060
23	2060-2070
24	2070-2080
25	2080-2090
26	2090-2100
27	2100-2110
28	2110-2120
29	2120-2130
30	2130-2140
31	2140-2150
32	2150-2160
33	2160-2170
34	2170-2180
35	2180-2190
36	2190-2200
37	2200-2210
38	2210-2220
39	2220-2230
40	2230-2240
41	2240-2250
42	2250-2260
43	2260-2270
44	2270-2280
45	2280-2290
46	2290-2300
47	2300-2310
48	2310-2320
49	2320-2330
50	2330-2340
51	2340-2350
52	2350-2360
53	2360-2370
54	2370-2380
55	2380-2390
56	2390-2400
57	2400-2410
58	2410-2420
59	2420-2430
60	2430-2440
61	2440-2450
62	2450-2460
63	2460-2470
64	2470-2480
65	2480-2490
66	2490-2500
67	2500-2510
68	2510-2520
69	2520-2530
70	2530-2540
71	2540-2550
72	2550-2560
73	2560-2570
74	2570-2580
75	2580-2590
76	2590-2600
77	2600-2610
78	2610-2620
79	2620-2630
80	2630-2640
81	2640-2650
82	2650-2660
83	2660-2670
84	2670-2680
85	2680-2690
86	2690-2700
87	2700-2710
88	2710-2720
89	2720-2730
90	2730-2740
91	2740-2750
92	2750-2760
93	2760-2770
94	2770-2780
95	2780-2790
96	2790-2800
97	2800-2810
98	2810-2820
99	2820-2830
100	2830-2840
101	2840-2850
102	2850-2860
103	2860-2870
104	2870-2880
105	2880-2890
106	2890-2900
107	2900-2910
108	2910-2920
109	2920-2930
110	2930-2940
111	2940-2950
112	2950-2960
113	2960-2970
114	2970-2980
115	2980-2990
116	2990-3000
117	3000-3010
118	3010-3020
119	3020-3030
120	3030-3040
121	3040-3050
122	3050-3060
123	3060-3070
124	3070-3080
125	3080-3090
126	3090-3100
127	3100-3110
128	3110-3120
129	3120-3130
130	3130-3140
131	3140-3150
132	3150-3160
133	3160-3170
134	3170-3180
135	3180-3190
136	3190-3200
137	3200-3210
138	3210-3220
139	3220-3230
140	3230-3240
141	3240-3250
142	3250-3260
143	3260-3270
144	3270-3280
145	3280-3290
146	3290-3300
147	3300-3310
148	3310-3320
149	3320-3330
150	3330-3340
151	3340-3350
152	3350-3360
153	3360-3370
154	3370-3380
155	3380-3390
156	3390-3400
157	3400-3410
158	3410-3420
159	3420-3430
160	3430-3440
161	3440-3450
162	3450-3460
163	3460-3470
164	3470-3480
165	3480-3490
166	3490-3500
167	3500-3510
168	3510-3520
169	3520-3530
170	3530-3540
171	3540-3550
172	3550-3560
173	3560-3570
174	3570-3580
175	3580-3590
176	3590-3600
177	3600-3610
178	3610-3620
179	3620-3630
180	3630-3640
181	3640-3650
182	3650-3660
183	3660-3670
184	3670-3680
185	3680-3690
186	3690-3700
187	3700-3710
188	3710-3720
189	3720-3730
190	3730-3740
191	3740-3750
192	3750-3760
193	3760-3770
194	3770-3780
195	3780-3790
196	3790-3800
197	3800-3810
198	3810-3820
199	3820-3830
200	3830-3840
201	3840-3850
202	3850-3860
203	3860-3870
204	3870-3880
205	3880-3890
206	3890-3900
207	3900-3910
208	3910-3920
209	3920-3930
210	3930-3940
211	3940-3950
212	3950-3960
213	3960-3970
214	3970-3980
215	3980-3990
216	3990-4000
217	4000-4010
218	4010-4020
219	4020-4030
220	4030-4040
221	4040-4050
222	4050-4060
223	4060-4070
224	4070-4080
225	4080-4090
226	4090-4100
227	4100-4110
228	4110-4120
229	4120-4130
230	4130-4140
231	4140-4150
232	4150-4160
233	4160-4170
234	4170-4180
235	4180-4190
236	4190-4200
237	4200-4210
238	4210-4220
239	4220-4230
240	4230-4240
241	4240-4250
242	4250-4260
243	4260-4270
244	4270-4280
245	4280-4290
246	4290-4300
247	4300-4310
248	4310-4320
249	4320-4330
250	4330-4340
251	4340-4350
252	4350-4360
253	4360-4370
254	4370-4380
255	4380-4390
256	4390-4400
257	4400-4410
258	4410-4420
259	4420-4430
260	4430-4440
261	4440-4450
262	4450-4460
263	4460-4470
264	4470-4480
265	4480-4490
266	4490-4500
267	4500-4510
268	4510-4520
269	4520-4530
270	4530-4540
271	4540-4550
272	4550-4560
273	4560-4570
274	4570-4580
275	4580-4590
276	4590-4600
277	4600-4610
278	4610-4620
279	4620-4630
280	4630-4640
281	4640-4650
282	4650-4660
283	4660-4670
284	4670-4680
285	4680-4690
286	4690-4700
287	4700-4710
288	4710-4720
289	4720-4730
290	4730-4740
291	4740-4750
292	4750-4760
293	4760-4770
294	4770-4780
295	4780-4790
296	4790-4800
297	4800-4810
298	4810-4820
299	4820-4830
300	4830-4840
301	4840-4850
302	4850-4860
303	4860-4870
304	4870-4880
305	4880-4890
306	4890-4900
307	4900-4910
308	4910-4920
309	4920-4930
310	4930-4940
311	4940-4950
312	4950-4960
313	4960-4970
314	4970-4980
315	4980-4990
316	4990-5000
317	5000-5010
318	5010-5020
319	5020-5030
320	5030-5040
321	5040-5050
322	5050-5060
323	5060-5070
324	5070-5080
325	5080-5090
326	5090-5100
327	5100-5110
328	5110-5120
329	5120-5130
330	5130-5140
331	5140-5150
332	5150-5160
333	5160-5170
334	5170-5180
335	5180-5190
336	5190-5200
337	5200-5210
338	5210-5220
339	5220-5230
340	5230-5240
341	5240-5250
342	5250-5260
343	5260-5270
344	5270-5280
345	5280-5290
346	5290-5300
347	5300-5310
348	5310-5320
349	5320-5330
350	5330-5340
351	5340-5350
352	5350-5360
353	5360-5370
354	5370-5380
355	5380-5390
356	5390-5400
357	5400-5410
358	5410-5420
359	5420-5430
360	5430-5440
361	5440-5450
362	5450-5460
363	5460-5470
364	5470-5480
365	5480-5490
366	5490-5500
367	5500-5510
368	5510-5520
369	5520-5530
370	5530-5540
371	5540-5550
372	5550-5560
373	5560-5570
374	5570-5580
375	5580-5590
376	5590-5600
377	5600-5610
378	5610-5620
379	5620-5630
380	5630-5640
381	5640-5650
382	5650-5660
383	5660-5670
384	5670-5680
385	5680-5690
386	5690-5700
387	5700-5710
388	5710-5720
389	5720-5730
390	5730-5740
391	5740-5750
392	5750-5760
393	5760-5770
394	5770-5780
395	5780-5790
396	5790-5800
397	5800-5810
398	5810-5820
399	5820-5830
400	5830-5840
401	5840-5850
402	5850-5860
403	5860-5870
404	5870-5880
405	5880-5890
406	5890-5900
407	5900-5910
408	5910-5920
409	5920-5930
410	5930-5940
411	5940-5950
412	5950-5960
413	5960-5970
414	5970-5980
415	5980-5990
416	5990-6000
417	6000-6010
418	6010-6020
419	6020-6030
420	6030-6040
421	6040-6050
422	6050-6060
423	6060-6070
424	6070-6080
425	6080-6090
426	6090-6100
427	6100-6110
428	6110-6120
429	6120-6130
430	6130-6140
431	6140-6150
432	6150-6160
433	6160-6170
434	6170-6180
435	6180-6190
436	6190-6200
437	6200-6210
438	6210-6220
439	6220-6230
440	6230-6240
441	6240-6250
442	6250-6260
443	6260-6270
444	6270-6280
445	6280-6290
446	6290-6300
447	6300-6310
448	6310-6320
449	6320-6330
450	6330-6340
451	6340-6350
452	6350-6360
453	6360-6370
454	6370-6380
455	6380-6390
456	6390-6400
457	6400-6410
458	6410-6420
459	6420-6430
460	6430-6440
461	6440-6450
462	6450-6460
463	6460-6470
464	6470-6480
465	6480-6490
466	6490-6500
467	6500-6510
468	6510-6520
469	6520-6530
470	6530-6540
471	6540-6550
472	6550-6560
473	6560-6570
474	6570-6580
475	6580-6590
476	

INDEX

TO THE

RULES AND REGULATIONS.

1849-50.

	Page	Sec.
Anchors, quality and weight	xxiii.	71, 72
Appointments vested in the Committee	vi.	13
Ballot, all elections to be made by	vi.	15
Beams, sizes and fastenings	xi.	39
— ditto	xi.	40
— ditto	xi.	41
Bilges, how to be secured	xiii.	46
Boats, quality and number	xxiii.	75
Boilers, Steamers, examination	xxiii.	78
Bolts, description and sizes	xiii.—xxvii.	46
— in the limber strakes to be through and clenched	xiii.	46
— Butt and Bilge	xiii.	46
— ditto deficient	xv.	47
Books, Register, Subscriptions	v.	3, 4, 5
By-Laws, power to make	vi.	17
Cables, quality and quantity	xxiii.	73
— Certificate of testing to be produced to surveyors... ..	xxiii.	73
— to be marked with the amount of strain applied	xxiii.	73
Caulking bottoms of Ships	xxii.	67
Certificates of Classification, Form	xxxvi.	—
— Fees	viii.	29
Characters of Ships, how assigned	ix.	32
Chocks	x.	37
Class, First (A) definition	ix.	33
— " Limitation of term	ix.	34
— " Surveys while building	ix.	35
— " Twelve years grade	x.	37
— " Eleven years grade	xv.	49
— " Ten years grade	xv.	50
— " Lower grades	xv.	51
— " Not built under survey	xv.—xvi.	51, 53
— " Built under a roof	xv.	52
— " Continuation in	xvi.	54
— " ditto	xix.	59
— " to lapse into <i>Æ</i> class	xxv.	87
— " Restoration to, First rule	xvii.—xviii.	55, 56
— " ditto, Second rule	xviii.	57, 58
— " Diphthong, (<i>Æ</i>) definition	xix.	60

	Page	Sec.
Class, First, Distinction of the Asterisk	xix.	60
— „ Exceptions to ditto	xix.	60
— „ Annual surveys	xx.	61
— „ ditto form	xxxvi.	—
— „ Notice of reduction	vii.	21
— „ ditto	xx.	61
— Second, (E) definition	xxi.	64
— Third, (I.) definition	xxi.	66
Classification, formation of rules	ix.	31
— Confirmation of character	vi.	18
— Certificates	viii.	29
— ditto Form	xxxvi.	—
Colonial-built Ships	xx.—xxi.	62, 63
Committee, how constituted	v.	8
— <i>ex-officio</i> Members	v.	8
— Annual retirement	vi.	9
— Vacancies to be filled up	vi.	9
— Election of Chairman	vi.	11
— Special Meetings	vi.	14
— to assign character	ix.	32
— Classification, rotation	vi.	12
— ditto Chairman	vi.	12
— Members excluded	vi.	16
Continuation of Ships, Class A	xvi.	54
— ditto	xix.	59
Crutch, required for Vessels 150 tons and above	xi.	41
Defects, to be free from	x.	37
Double Floors	x.	38
Doubling of Ships, regulation	xxii.	68
— „ built in India	xxii.	70
Dowels required when the heads and heels of Timbers are square x.		37
Fastenings, nature and description	xiii.	46
— additional period allowed when the whole are of copper or mixed metal	xiii.	46
— Knees and Riders	xi.	41
— ditto	xx.	62
— Iron or Copper	xxii.	69
— Ships built in India	xxii.	70
— exception to Iron	xxii.	70
Fees, Table of	viii.	16
— Special Surveys	vii.	25
— ditto	viii.	28
Fees to Surveyors prohibited	vii.	24
Forecastles, topgallant	x.	37
Iron Ships	xxvi.	—
Keels of Ships, sizes	xi.	—

	Page	Sec.
Kelsons of Ships, sizes and scarphs	xi.	—
Knees „ No. and description	xi.—xxvii.	41
Knees of Ships, Colonial-built	xx.	62
Masts, Yards, &c.	xxii.	71
Orlop Beams required	xi.	41
Planking, quality	xii.	43, 44
—— distance of the Butts	xii.	45
—— ditto exceptions	xii.	45
—— thicknesses	xii.	—
Pointers	xi.	41
Poops	x.	37
Register Books, Old	v.	1
—— New, 1834	v.	2
—— periodically posted	v.	6
—— Supplements	v.	7
—— Subscriptions	v.	3, 4, 5
Repairs, Notice to be given in writing	vii.	22
—— Appeal against	vii.	23
Reports of Survey, Form	xxxii.	—
—— ditto	ix.	36
—— access to them	vii.	19
Rigging, condition	vii.	21
Room and Space, increase	x.	38
Rules, Six months' notice	vi.	17
—— price of a set	viii.	30
Scantling of Timber	x.	37
—— Scale of	xv.—xxvi.	48
—— applicable to Steamers	xxiv.	80, 81, 82
Shifts of Timber	xii.	42
Ships, Foreign, Classification	vii.	20
—— Colonial-built ditto	xii.	20
—— ditto	xx—xxi.	62, 63
—— Fir	xx.	62
—— in progress of building	ix.	35
—— not Surveyed while building	xv.	51
—— ditto	xvi.	53
—— ditto to be placed in dry dock, or laid in ways	xv.	51
—— built under a roof	xvi.	52
—— wholly fastened with copper or mixed metal bolts	xiii.	46
—— Opening required for examination	xv.	51
—— ditto Colonial-built Ships	xxi.	63
—— India-built, Fastenings	xxii.	70
—— built of Iron	xxvi.	—
—— Class A, 12 years	x.	37
—— „ 11 „	xv.	49
—— „ 10 „	xv.	50
—— „ lower grades	xv.	51

	Page	Sec.
Ships, Class A, to lapse into the <i>Æ</i> class	xxv.	87
—— To be surveyed within one half the period assigned them	ix.	34
—— Class <i>Æ</i> and * <i>Æ</i>	xix.	60
—— Class E	xxi.	64
—— Class I	xxi.	66
—— continued in Class A	xvi.	54
—— ditto	xix.	59
—— Restored to Class A, First rule	xvii.—xviii.	55, 56
—— ditto „ Second rule	xviii.	57, 58
—— bottoms to be caulked	xxi.	67
Society, Members of the	v.	3
Special Surveys allowed	vii.	21, 23
—— „ Fees	vii.	25
—— ditto	viii.	28
Steam Vessels, rules	xxiii.	77
—— Two annual surveys	xxiii.	77
—— Examination of Machinery	xxiii.	78
—— Relaxation in favour of	xxiv.	79
—— Scantlings	xxiv.	80, 81, 82
—— Stores	xxv.	85
—— Form of Certificate for Machinery	xxxvii.	—
Stores, complete Figure 1	xxiii.	76
—— defective or deficient, Figure 2	xxiii.	76
Subscriptions, annual... ..	v.	3, 4, 5
Surveys of ships, annual	ix.	34
—— Forms for reporting ditto	xxxiv.—xxxvi.	—
—— ditto	xx.	61
—— ditto occasional	xxi.	65
Surveyors not to class ships	ix.	32
—— may be employed on special surveys	vii.	25
—— ditto	viii.	28
—— to give notice of reduction or repairs	vii.	21, 22
—— appeal against their requisition	vii.	23
—— prohibited from taking Fees	vii.	24
Tables of Timbering and Planking	xxviii. to xxxiii.	—
Timber to be well squared	x.	37
—— Framed and bolted	x.	37
—— Butts and thickness	x.	37
—— Shifts	xi.	42
—— Scantlings, Scale	x.	37
—— ditto	xv.	48
—— Steam Vessels	xxiv.	81, 82
—— Inferior or second-hand	xvii.	56
Tonnage least adopted	xxiii.	77
Treenails, quality	xiii.	46
Workmanship, Report of Survey	xxxv.	—

LLOYD'S REGISTER

OF

BRITISH AND FOREIGN SHIPPING.

RULES AND REGULATIONS.

1. THE operations of the Societies of the two Register Books of Shipping printed for the use of Merchants, Ship-Owners, and Underwriters, having ceased in the year 1834, this Society was established for the important purpose of obtaining a faithful and accurate Classification of the Mercantile Marine of the United Kingdom, and of the Foreign Vessels trading thereto, and for the government of which the following Rules and Regulations have been from time to time adopted.

2. A Register Book to be printed annually for the use of Subscribers.

3. Each person subscribing the sum of Three Guineas per annum (or such other sum as the General Committee may fix), to be considered a Member of the Society, and entitled *for his own use* to one copy of the Register Book.

4. The subscription of Public Companies, or Public Establishments (not being engaged in Marine Insurance), to be Ten Guineas per Annum.

5. The subscription of Marine Insurance Companies to be regulated by the Committee on special application, in each case, but not to be less than Ten Guineas per Annum.

6. The Register Book to be periodically posted throughout the year.

7. For the convenience of Subscribers not resident in London, a Supplement, containing the additions to, and corrections made in, the Register Book, to be printed fortnightly in such convenient form, as to admit of its transmission by Post, so that such parties may be furnished, from time to time, with the latest and most complete information.

8. The superintendence of the affairs of the Society to be under the direction of a Committee in London, of twenty-four members, consisting

of an equal proportion of Merchants, Ship-Owners, and Underwriters. The Chairman for managing the affairs of Lloyd's, and the Chairman of the General Ship-Owners' Society, and also the Chairman and Deputy Chairman of the Liverpool Committee, and the Chairman of the Rotation Committees for the time being, to be, *ex officio*, Members of the Committee.

9. Six of the members, namely, two of each of the constituent parts of the Committee, to go out annually by rotation, but to be eligible to be re-elected.

10. The vacancies so arising to be filled up by the election of two Underwriters and one Merchant by the Committee for managing the affairs of Lloyd's, and two Ship-Owners and one Merchant by the Committee of the General Ship-Owners' Society.

11. The Committee to appoint from their own body, annually, a Chairman and Deputy Chairman, and also a Chairman for a Sub-Committee of Classification.

12. The Committee to appoint a Sub-Committee of Classification, to be so regulated that each Member of the General Committee may, in rotation, take his turn of duty therein throughout the year.

13. The Secretary, Clerks, and Servants of the Society, and the Surveyors for London, Liverpool, and the other Outports, to be appointed by, and be under the direction of the General Committee.

14. Special meetings to be convened by order of the Chairman, or Deputy Chairman, or on the requisition of any three members.

15. All elections and appointments to be made by ballot.

16. No member of the Committee to be permitted to be present on the decision of the classification of any ship of which he is the owner, or wherein he is directly or indirectly interested.

17. The Committee to be empowered to make such By-laws for their own government and proceedings as they may deem requisite, not being inconsistent with the original Rules and Regulations under which the Society was established; but no new Rule or By-law to be introduced, nor any Rule or By-law altered, without special notice being given for that purpose at the meeting of the Committee next preceding that at which such Motion is intended to be made; such notice to be inserted in the summons convening the meeting. No new Rule, or alteration in any existing Rule, materially affecting the classification of ships, to take effect until the expiration of six months from the time it shall have been determined upon.

18. All reports of survey to be made in writing by the Surveyors according to the forms prescribed, and submitted for the consideration of the

General Committee, or of the Sub-Committee of Classification ; but the classing assigned by the latter to be subject to confirmation by the General Committee.

19. The reports of the Surveyors, and all documents and proceedings relating to the classification of ships, to be carefully preserved, and parties proving themselves to be interested therein, to have access to the same under the directions of the Chairman or Deputy Chairman.

20. Foreign ships, and ships built in the British possessions abroad (*See also Section 51*), to be surveyed on their arrival at a port in the United Kingdom ; but a due regard is to be had to the circumstance of their having been exempted from the supervision while building to which all British ships are subjected, and the class to be assigned to them is to be regulated according to their intrinsic quality, and from the best information the Committee can obtain.

21. In every case in which the class assigned to a ship may be proposed to be reduced, notice is to be given in writing to the Owner, master, or Agent, with an intimation that if the reduction be objected to, the Committee will be ready to direct a special survey, on the Owner, master, or Agent agreeing to pay the expenses attending the same, provided on the said survey there shall appear sufficient ground for the proposed reduction.

22. When the Surveyors consider repairs to be requisite, they are respectfully to communicate the same in writing to the Owner, master, or Agent, and if such repairs be not entered upon within a reasonable time, a corresponding report is to be made to the Committee for their decision thereon.

23. Parties considering the repairs suggested by the Surveyor to be unnecessary or unreasonable, may appeal to the Committee, who will direct a special survey to be held ; but should the opinion of the Surveyor be confirmed by the Committee, then the expense of such special survey is to be paid by the party appealing.

24. The Surveyors to the Society not to be permitted (without the especial sanction of the Committee), to receive any fee, gratuity, or reward whatsoever for their own use or benefit, for any service performed by them in their capacity of Surveyors to this Society, on pain of immediate dismissal.

25. The Surveyors will be directed to attend on special surveys of ships under damage, or repairs for Restoration, when required by merchants, Ship-Owners, or Underwriters ; the charge for which is to be regulated according to the nature and extent of the service performed. In all cases, the application for the assistance of the Surveyors must be made in writing addressed to the Secretary.

FUNDS.

26. The Funds to be under the authority and control of the Committee, and a statement of the Receipts and Expenditure to be annually printed for the information of the subscribers.

27. The following Fees to be charged to the Owners of ships prior to their vessels being classed and registered in the book.

I.

For Entering and Classing Ships, and for Entering and Classing Ships surveyed for Continuation, or repaired for Restoration.

For each Ship ...	...	under	100 Tons ...	£1 0 0
Ditto ...	of 100 Tons and under 200	...	...	2 0 0
Ditto ...	200 — 300	...	...	3 0 0
Ditto ...	300 — 400	...	...	4 0 0
Ditto ...	400 and upwards ...	...	...	5 0 0

II.

For Registering Repairs ; or change of Owners.

For each Ship ...	...	under	150 Tons ...	£0 10 0
Ditto ...	of 150 Tons and under 300	...	...	1 0 0
Ditto ...	300 — 500	...	...	2 0 0
Ditto ...	500 and upwards ...	...	...	3 0 0

III.

For Re-classing Ships (except when repaired) the Characters of which have been expunged.

For each Ship ...	...	under	200 Tons ...	£0 10 0
Ditto			200 and above	1 0 0

Special Surveys.

28. For Special Surveys, and where the Surveyors to the society are required by the Owners to superintend the building of ships, or repairs for Restoration, or otherwise, a charge will be made according to the nature and extent of the service performed.

29. Certificates of Classification, of the Form No. 6, signed by the Chairman of the General Committee, or by the Chairman of the Sub-Committee of Classification, and countersigned by the Secretary, will be granted on application; the charge for which is to be as follows:—

For Ships under 200 Tons	...	...	...	5s. each.
Ditto of 200	—	and above	...	10s. each.
30. Rules, each copy ...	...	...	...	2s. 6d.

RULES FOR CLASSIFICATION.

31. The Rules and Regulations for the classification of ships, which were originally framed after much labour and deliberation, aided by the valuable practical knowledge of the Committee of the General Ship-Owners' Society, having been revised and considerably modified, the following have been determined upon as well calculated to meet the fair claims of all parties interested in their application.

32. The characters to be assigned to ships to be, as nearly as possible, a correct indication of their real and intrinsic qualities, and to be in all cases fixed (not by the Surveyors, but) by the Committee, after due consideration of the Reports of the Surveyors and such other documents as may be submitted to them.

FIRST CLASS SHIPS.

First Description of the First Class,

33. Will comprise all ships which have not passed a prescribed age,* provided they are kept in a state of complete repair and efficiency : and they will be designated by the letter A.

34. The period to be assigned for their continuing on this Class to be determined with reference to the original construction and quality of the vessel, the materials employed, and the mode of building ; and their continuance for the time so assigned to depend upon its being shewn by occasional surveys (annually if practicable) that their efficiency is duly maintained. The characters of ships classed A for a term of years, will in future be struck out of the Register, unless such ships shall be brought under survey within a period in no case exceeding one-half of that originally assigned for their remaining in that class. After the expiration of the periods prescribed, ships will be permitted to remain on the List of the First Description of the First Class, or be restored thereto, for a further limited period, subject to the conditions hereinafter shewn in Sections 54, 55, and 57.

35. New ships are to be surveyed while building, by the Surveyors to this Society, in the following three stages of their progress, or they will be liable to lose one year of the period to which they might otherwise be entitled. (*See Section 53.*)

First.—When the frame is completed.

Second.—When the beams are put in, but before the decks are laid, and with at least two strakes of the plank of the ceiling between the lower deck and the bilge unwrought, to admit of an examination of the inner surface of the plank at the bottom.

Third.—When completed, and, if possible, before the plank be painted or payed.

* See the Tables of Timbering, &c. Nos. 1, 2, and 3.

36. A full statement, agreeably to Form No. 4, of the dimensions, scantlings, &c. of all new ships, verified by the builder, is to be transmitted by the Surveyor, and to be kept as a record in the office of the Society.

RULES TO BE OBSERVED IN BUILDING SHIPS.

TIMBERING.

37. The whole of the timber to be of good quality, of the descriptions hereinafter shewn in a Tabular Form, No. 1, as applicable to the several terms of years for which ships so constructed may respectively be appointed to remain on the List of the First Description of the First Class: the stem, stern post, beams, transoms, apron, knightheads, hawse timbers, and kelson of ships claiming to stand *twelve years*, to be entirely free from all defects; the frame to be well squared from the first foothook heads upwards and free from sap, and likewise below, unless the timber be proportionably larger than the scantling hereafter described; every alternate set of timbers to be framed and bolted together to the gunwale. The butts of the timbers to be close, and not to be less in thickness than one-third of the entire moulding at that place, and to be well chocked with a butt at each end of the chock. In all cases in which the heads and heels of the timbers shall be *square*, in vessels intended for the twelve years' grade, a dowel must be introduced into the ends of such timbers in order to connect them together.*

I.—THE SCANTLINGS TO BE NOT LESS THAN AS FOLLOWS:

	For Ships	Tons.	Tons.
ROOM AND SPACE TO BE	150	500
Floors sided, if square, and free from sap, to be at the kelson	20 in.	30 in.
First foothooks sided, if square, at floor heads	7 in.	11 in.
Second foothooks sided, if square, at the heads	6½ in.	10 in.
Third foothooks sided, and top timbers, if square	6 in.	9 in.
The frame to be moulded at kelson	8 in.	13 in.
The frame to be moulded at floor heads	7 in.	11 in.
Top timbers to be moulded at their heads at the sheerstrake	4 in	5 in.

38. The intermediate dimensions for the scantling of timbers between the floor heads and the gunwale to be regulated in proportion to the distance from the two points. Should the room and space be increased, the siding of

* In the construction of poops and top-gallant forecastles the timbers must be of the same materials as are required by the Rules (Table No. 1) for the "Top-timbers" of the frames of ships, according to the several terms of years appointed for such ships to remain on the first description of the first class. The outside planking of the forecastle and the sheerstrakes, planksheers, shelf or clamp, and spriketting of poops and top gallant forecastles must be likewise of the materials required by the Rules (Table No. 2) for the "Topsides" of the said ships. The remainder of the planking of the poops and top-gallant forecastles may be of fir of good quality. The beams of top-gallant forecastles and the mast beams, breast beam, and transom beam of poops, must be of the material required by the Rules (Table No. 1) for the beams of the said ships. The remainder of the beams and the water-ways of the poop may be of cedar, mahogany, Baltic fir, red pine, pitch pine, larch, hackmatac, tamarac, juniper, cowlie, or rock elm, in ships from the 7 A grade and upwards, and of yellow pine or American white spruce in all below that grade.

Requisites for Restoration.

56. All the bolts in the range of each deck to be driven out, and the planks taken out; the upper deck waterways, and planksheers and spirketting, and the strake next the waterways on the lower deck in the midships to be taken out; the sheathing to be entirely stripped off the bottom; *all the outside planking, from the copper upwards, or, if not coppered, then from the light water-mark upwards, to be scraped bright*; a strake in the upper course of the bottom, between the wales and the light water-mark fore and aft, and a plank in the ceiling at the floor heads on each side, to be taken out, the limbers to be clear, and the hooks forward to be exposed; and in that state the ship to be submitted to a special survey and examination, at which the attention of the Surveyors appointed by this Society is to be particularly directed to the state of the decks, the remaining plank of the topsides, the wales, upper courses, and treenails, and other fasterings; also to the state of the frame, hawse timbers, and knightheads, kelson, floors, foothooks, ceiling, and breasthooks, the rudder in all its parts and hangings; and if, after such examination, the Owner should consent to take out all planks, timbers, beams, knees, waterways, fastenings, and other parts that may be found defective, or objected to, and replace them with materials of the same species, or of equal quality with those of which the ship was originally constructed, such ships to be entitled to restoration to the First Description of the First Class, for a period proportionate to their real condition and the extent of the repairs performed; or if timber of an inferior description, or second-hand English or African Oak or Teak be used, then for a period not exceeding that for which such materials would have entitled a new ship to stand A 1 according to the tables, subject in either case to the ship being at all times thereafter kept in a state of efficient repair.

SECOND RULE.

57. If, *at any age* of a vessel, an Owner be desirous to have his ship restored to the First Description of the First Class, such restoration (on his consenting to the special survey hereinafter described, to be held by two Surveyors, and performing the repairs thereby found requisite) will be granted for so long a period as may be deemed expedient by the Committee, not exceeding, in any case, the term of eight years.

Requisites for Restoration.

58. The whole of the outside plank of the vessel to be taken off as low as the second foothook heads, and the remainder of the planking, either outside or inside, together with all the decks, to be removed, *so as to expose the*

timbers of the frame entirely to view, and in that state the ship to be submitted to a special survey and examination by the Surveyors appointed by this Society; and if, after such examination, all timbers, beams, knees, kelsons, transoms, breasthooks, remaining plank, inside or outside, or other parts found to be defective, be replaced with materials of the same species, or of equal quality with those of which the ship was originally constructed, and all the treenails driven out and renewed, such ship may be restored to the First Description of the First Class. But if timber of an inferior description, or second-hand English or African Oak or Teak be used, then for a period not exceeding that for which such materials would have entitled a new ship to stand A 1 according to the tables, subject, in either case, to the ship being at all times thereafter kept in a state of efficient repair.

59. On the same principle of giving to ships which shall be actually proved to be superior of their class, and in excellent condition, every advantage that can be extended to them consistently with the maintenance of the general principles on which the Society was established, ships which have been *restored* to the Class A shall be entitled to an extension of the time, subject to the same conditions of survey and examination as are prescribed for ships proposed to be continued in the First Description of the First Class, at the expiration of the period first assigned to them; but in like manner, the term of such extended continuance shall be limited to a period not exceeding one-third of the number of years for which the ships may respectively have been *restored*, without any reference whatever to the period originally assigned to them.

FIRST CLASS SHIPS.

Second Description,

60. Will comprise all ships which having passed the prescribed age, but have not undergone the repairs which would have entitled them to be continued in or restored to the First Description, or having been continued or restored, and the additional period thus assigned having expired, shall appear on survey to be still in a condition for the safe conveyance of dry and perishable cargoes, and they will be designated by the diphthong character, *Æ*. (*See also Section 87.*) Such ships, however, of this class as shall be found on survey to be of superior description, *being fit for the safe conveyance of dry and perishable goods to and from all parts of the world*, shall be distinguished by inserting their characters in Red with an asterisk thus prefixed, **Æ*.—*But in all cases in which an Owner may claim this distinction, the ship, to entitle her to it, must undergo a special survey by two surveyors, to be appointed in every instance by the Committee, and be subject to a compliance in other respects with*

the requisitions prescribed by the rule, section 54.—Those ships, however, the original construction of which may not have entitled them to be classed in the First Class A for a longer period than Five Years, will not be allowed the distinction of the asterisk.

61. For the purpose of continuing a ship on the List of Ships of the Second Description of the First Class, a careful survey will be required to be made annually, or on the return of the ship from every foreign voyage, by one of the Surveyors to this Society, who is to state distinctly and separately the actual condition of the *upper deck fastenings, water-ways, spirketting, planksheers, topsides, upper deck with its appendages, lower deck fastenings, wales, counter, plank, and treenails outside to the water's edge, rudder, windlass, and capstan, beams, breasthooks, transoms, and timbers*; but if not surveyed within twelve months after entering the Second Description of the First Class, such ship having been during that time in some port in the United Kingdom, the character will be omitted until such survey be held; or, as the case may be, she will be allowed to pass into the class E. Whenever it shall appear to the Surveyors that a vessel classed *Æ with the asterisk* shall no longer be in a condition to deserve that distinction, notice of the proposal to reduce her shall be given *in writing* to the Owner, Master, or Agent, in the same manner as is prescribed by the rules, section 21, page 7.

BRITISH NORTH-AMERICAN BUILT SHIPS, AND FIR SHIPS.

62. Ships built in the British North-American Colonies, and all ships, wherever built, the frames of which are composed of *Fir*, of 300 tons and above, shall, in order to entitle them to be classed in the Register Book of the Society, be secured in their bilges by the application of iron riders to cover the joints of the floor and foothook heads, to extend from the height of the hold beams to the floors so as to receive not less than two bolts in a substantial part of the floors; the number of iron riders to be not less than one on every fourth floor on each side from two feet abaft the mainmast to two feet abaft the foremast, the size thereof to be not less than $3\frac{1}{4}$ inches by $1\frac{1}{4}$ inches at the joints of the timbers for ships of from 300 to 400 tons, and to be increased *one quarter of an inch each way*, for every one hundred tons of increased size. That all such ships shall also be secured by iron hanging knees to the hold beams, one knee to every alternate hold beam, provided the distance of the said beams from each other does not exceed 4 feet 6 inches, and the tonnage be less than 400 tons; but if the distance exceeds 4 feet 6 inches, or the ship is 400 tons and above, then one to every hold beam. The knees to be connected with the riders or not, at the option or convenience of the owners; but if not so connected, the side arms are to

be long enough to receive at least four bolts; the whole to be securely bolted with bolts of sufficient size. In cases of refusal, the words "not fastened as per rule, section 62," will be inserted against the vessels' names.

63. All British North-American built ships, which have gone, or may go off the List of Ships of the First Description of the First Class, or which may be of an age exceeding the period for which they might have had claims to be put upon that class (whether classed or not), shall, as from time to time they come under examination, be subjected to a careful survey, to be made by one of the Surveyors to this Society;—and no further character shall be assigned them unless a survey shall be held as follows; and planking, either inside or outside, at the discretion of the Surveyors, in quantity equal to *one entire strake* fore and aft on both sides, shall be removed; to be taken out in mid-ships immediately above the turn of the Bilge, and *at such height* forward and aft as may, in their judgment, best expose the timbers of the frame to view; that a special report of the state of these timbers, and of the general state and condition of the upper deck fastenings, waterways, spirketting, planksheers, topsides, upper deck with its appendages, lower deck fastenings, wales, counter, plank and treenails outside to the water's edge, rudder, windlass, and capstan, beams and breasthooks, shall be transmitted by the Surveyors to the Committee; and on the receipt of such report the classing shall take place. If the diphthong character be then assigned, it shall be continued (subject to an annual survey) for a period not exceeding the number of years originally assigned for the ship's remaining in the First Description of the First Class; at the expiration of which the character will be discontinued, unless a similar survey and examination of the frame be again submitted to.

SECOND CLASS SHIPS,

64. Will comprise all ships which shall be found on survey unfit for carrying *dry* cargoes, but perfectly fit for the conveyance, *on any voyage*, of cargoes not in their nature subject to sea-damage; and they will be designated by the letter E.

65. Subject to occasional inspection, at least once in every two years, ships will continue in this class so long as their condition shall, in the opinion of the Committee, entitle them thereto.

THIRD CLASS SHIPS,

66. Will comprise ships which shall be found on survey fit for the conveyance, *on short voyages* (not out of Europe), of cargoes in their nature not subject to sea-damage; and they will be designated by the letter I.

67. The bottom of every ship is to be caulked once in every five years, unless wood-sheathed and felted, and then once in every seven years, except in the case of *Teak-built ships*, upon which a special survey may have been requested, and the Surveyors having ascertained, by the removal of a strake of sheathing fore and aft under the wales, and a strake at the first foothook heads, and by causing listings to be cut out at the wood's ends, that such caulking is not required, the same may then be dispensed with. If any ship shall be stripped within the periods above mentioned, her bottom is to be caulked, *if necessary*.

68. In all cases in which ships may be doubled, doubling of not less than the thicknesses hereinafter mentioned will be required, the same to be properly wrought and fastened as follows: in every instance the doubling is to be at least single fastened either with treenails or with bolts, and a through bolt in every butt. If treenails be used, every treenail must, if practicable, be a through fastening; and if bolts be used, then one-sixth of them from the lower part of the bilge upwards must be through and clenched on the ceiling in addition to the butt bolts.

The throat bolts of iron knees, and the bolts of iron hooks, crutches, and pointers, must be renewed through the doubling.

The thickness of the doubling for the wales and bottom, on ships

Under 400 tons to be not less than	... 2 inches
of 400 „ and under 600 tons	... 2½ „
of 600 „ and above	... 3 „

On the topsides of ships not exceeding 300 tons, the thickness may be 1½ inches.

No ship hereafter doubled, shall be entitled to the asterisk or any higher class, unless it shall be ascertained at the time of doubling that the frame is capable of securely retaining the fastenings.

Iron-fastened Ships.

69. All ships although iron-fastened (except as hereinafter mentioned) shall be classed in the same manner as copper-fastened ships, so long as they remain unsheathed with copper, provided they are, in all other respects, constructed in accordance with the Rules; but when sheathed with copper over the iron fastenings, the words “Coppered over Iron Bolts” shall be added to the character in the Register Book, and continued until the ship be thoroughly copper-fastened.

70. Ships built in India, although fastened with iron, shall be permitted to be copper-sheathed without any mark being placed in the Book, provided the bottom be felted or chunamed, and wood-sheathed, and subject to a careful examination of the iron fastenings on every occasion on which the sheathing is stripped off, for which purpose some of the bolts and nails are to be taken out of the lower part of the bottom, and to be seen by the Surveyor; but no such ship shall be permitted to continue either on the A or on the *Æ* class for a longer period than one-half the number of years beyond the term originally assigned for her remaining on the First Description of the First Class, unless the bottom shall have been doubled, or the whole of the iron fastenings taken out or properly secured, and the bottom refastened with bolts, or treenails, or both, including the middle line and breasthook and crutch bolts.

SHIPS' ANCHORS, CABLES, AND STORES.

71. All vessels are required to have their masts, spars, and standing rigging in good order, and sails in sufficient number and good condition, and every ship is to be supplied with a good hempen stream-cable or tow-line of sufficient size and length, and with at least one good warp; and all vessels are to be provided with anchors of proper weight, and cables of approved quality in number and length according to the undermentioned scale :—

Anchors.

72. All vessels under 200 tons to have at least two bower anchors, and all vessels of 200 tons and above, to be provided with at least three bower anchors.

Cables.

	Tons.	Fathoms.
73. All vessels under 150 to have at least 150 if chain.		
— of 150 and under 250	180	do.
— 250	200	do.
— 350	240	do.
— 500	270	do.
— 700 and upwards	300	do.

N.B. The Surveyors shall require with all new chains supplied to ships, the production of a certificate of their having been duly tested, and of the strain applied to them: and that each length (generally consisting of about fifteen fathoms), should be marked with the amount of strain applied to them.

74. In all cases where hempen cables are used, one-sixth more in length will be required.

Boats.

75. All vessels under 150 tons to be provided with one good boat; and every vessel of 150 tons and above to be provided with at least two good boats.

76. The efficient state and condition of ships' anchors, cables, and stores, will be designated by the figure 1; and where the same are found insufficient in quantity, or defective in quality, by the figure 2.

SHIPS NAVIGATED BY STEAM.

77. All sea-going vessels navigated by *Steam* shall be required to be surveyed *twice in each year*, when a character will be assigned to them, according to the report of survey as regards the classification of the hull and materials of the vessel.

78. That with respect to the boilers and machinery, the owners are required to produce to the Surveyors to this Society at the above-directed surveys, a certificate from some competent *Master Engineer*, describing their state and condition at those periods; and to which certificate it is desirable there should be added a description of the particulars of the same, as far as may be practicable, in the manner and form annexed, No. 7; to be appended to the

report of survey, and delivered to the Committee, who will thereupon insert in the Register Book the letters "M.C." denoting that the boilers and machinery have been inspected and certified to be in good order and safe working condition ; but if no certificate of their condition be furnished by the Owner or Master, then no character can be assigned for the machinery.

79. *Hull*.:—The Surveyors to this Society are directed to examine and report the scantling of timbers, plank, and fastenings, and to state where built, and by whom, in the same manner as directed for sailing vessels.

The following relaxation from the Rules applicable to sailing vessels will be allowed in favour of steamers.

Fir (to be either Pitch Pine, Baltic Red Fir, or American Red Pine), Larch, Hackmatack, or Juniper, may be used for upper deck beams, to an extent not exceeding *one-half* the number of beams required according to the vessel's tonnage.

The same materials may be used in the outside planking from the first foot-hook heads upwards, excepting for the wales, sheerstrakes, and planksheers.

The same materials may be likewise used in the inside planking, excepting for the bilge planks, shelf-pieces and stringers, and clamps.

Steam-vessels built in all other respects in conformity with the annexed tables shall be classed for the terms of years therein respectively prescribed, subject to the following conditions :—

That the Rule requiring a survey 'twice a year' be rigidly enforced, and that whenever the boilers are taken out, the vessel shall be subjected to a particular and special survey, in order to ascertain her general condition, and particularly the state of the Fir, or other materials herein allowed to be used.

That unless such surveys be held, the characters which may have been assigned to steam-vessels shall be struck out annually on reprinting the Register Book.

80. *Scantlings*.:—The scantlings for a steam-vessel under 300 tons register including the engine room, are to be deemed sufficient, if equal to those required by the scale prescribed in the Rules of this Society for a sailing vessel of *two-thirds* of the total tonnage of such steam-vessel.

81. But for a steam-vessel *above* 300 tons register, including the engine room, the scantlings are to be equal to those required by the scale for a sailing vessel of *three-fourths* of the total tonnage of such steam-vessel.

82. *Floors*.:—Where the vessel is not *filled in solid to the floor-heads in the engine room*, an exception will be specially made against any reduction of the scantling of the *floors*, which in such cases will not be permitted to be

upon the reduced scale of two-thirds or three-fourths of the dimensions for the *scantling* of sailing vessels, as before stated; but the *floors* will then be required to be equal to the dimensions set forth in the Rules for ships of the tonnage of the steam-vessel, including the engine room.

Vessels fitted with auxiliary steam power are considered to be sailing vessels (not steamers) and will not be allowed any exception as to their scantlings.

83. The Surveyors are required to report the number, size, length, fastenings, and mode of arrangement of the engine and boiler *sleepers*, and the description of timber of which they are composed, and whether diagonally trussed with wood or iron, and to what extent; the length, size, and fastenings of shelf-pieces and paddle beams; and whether the vessel be constructed with sponcings, and how they are formed; and to give the length and shifting of the plank outside and inside.

84. *Materials and Stores*.:—The Surveyors are to examine and report the number and description of the masts, sails, anchors, cables, hawsers, warps, and boats, as directed to be done for sailing vessels; but the anchors and cables will not be required to exceed in weight and length those of a sailing vessel of two-thirds of the total tonnage of the steam-vessel.

85. The Surveyors are to be particular in examining and reporting the condition of the boats of all vessels employed in carrying passengers.

86. In all cases in which the application of the rules must necessarily be regulated by the ship's admeasurement, the *least* tonnage (whether the result of the old or new method) is to be adopted.

87. At the termination of the several periods assigned to ships for remaining on the First Description of the First Class, they will be reduced to the Second Description designated by the diphthong *Æ*; but if during the *last year* of the period assigned to them as ships A 1, the Owners of a ship shall, in consequence of her being about to proceed on a distant foreign voyage, apply to have her surveyed for continuation on the letter A, or for the Asterisk, a special survey shall be held conformably to the Rules, sections 54 or 60, as the case may be: and if from the report of such special survey, the ship shall appear to be in all respects in a sound and efficient state, such as is required by those Rules, the Committee shall, from the period at which the ship's character would terminate, continue such ship on the letter A, or assign to her the character **Æ* in accordance with the Rules referred to.

The Committee's attention having been urgently called to the necessity of providing for the classification of vessels built of Iron, they passed a Resolution to the following effect on the 4th January, 1844:—

“That the character of A 1 will in future be granted to such ships as shall be constructed of Iron under the survey of the Surveyors to this Society, and be reported, on their completion, to have been built of good and substantial materials, and with good workmanship.

“That Iron ships, already built, upon being subject to a careful and minute survey, and being reported to be in a high state of repair and efficiency, will also be classed as above; but if not so reported, they will be allowed such other character as, on a due consideration of their respective claims, they may be found to deserve.

“That in every instance in which a character may be assigned to ships built of Iron, it must be understood that such ships must be subjected to a careful ANNUAL SURVEY, and that the continuance or otherwise of the character assigned will depend entirely upon the result of this survey.—And that vessels *not surveyed annually* will lose their character.”

In the Appendix will be found copies of the Resolutions passed on the 24th August, 1848, and 18th January, 1849, the former regulating the use of Elm, as now restricted, in the outside planking of ships, and the latter, the more extended use of the following descriptions of materials for floors and first futtocks, subject to the limitations therein contained, viz.

Black Birch	}	For FLOORS.
Larch		
Hackmatack		
Tamarac		
Juniper		
Witch Hazel		
American Rock Elm		
Cowdie		
Black Birch ...		For FIRST FUTTOCKS.

The attention of Ship-owners and Ship-builders is respectfully invited to these amendments of the Rules.

By Order of the Committee,

CHARLES GRAHAM,

Secretary.

No. 2, White Lion Court, Cornhill,
London, 1st July, 1849.

SEAL: for measuring the proportionate dimensions of TIMBER, PLANK, &c.



X3. Set off the Number of Inches given in the Rules for Ships for Ships of 50 Tons, 150 Tons, 300 Tons, & 1300 Tons, on their respective perpendiculars — then a line drawn through these points will show on the intermediate perpendiculars the proportionate dimensions of the corresponding Timbers, Planks, &c.

The Committee's attention having been urgently called to the necessity of providing for the classification of vessels built of Iron, they passed a Resolution to the following effect on the 4th January, 1844:

"That the character of A 1 will in future be granted to such ships as shall be constructed of Iron under the survey of the Surveyors to this Society, and be reported, on their completion, to have been built of good and substantial materials, and with good workmanship.

"That Iron ships, already built, upon being subject to a careful and minute survey, and being reported to be in a high state of repair and efficiency, will also be classed as above; but if not so reported, they will be allowed such other character as, on a due consideration of their respective claims, they may be found to deserve.

"That in every instance in which a character may be assigned to ships built of Iron, it must be understood that such ships must be subjected to a careful ANNUAL SURVEY, and that the continuance or otherwise of the character assigned will depend entirely upon the result of this survey.—And that vessels *not surveyed annually* will lose their character."

In the Appendix will be found copies of the Resolutions passed on the 24th August, 1848, and 18th January, 1849, the former regulating the use of Elm, as now restricted, in the outside planking of ships, and the latter, the more extended use of the following descriptions of materials for floors and first futtocks, subject to the limitations therein contained, viz.

Black Birch	} For Floors.
Larch	
Hackmatack	
Tamarac	
Juniper	
Witch Hazel	
American Rock Elm	
Cowdie	
Black Birch ...	For Finer Futtocks.

The attention of Ship-owners and Ship-builders is respectfully invited to these amendments of the Rules.

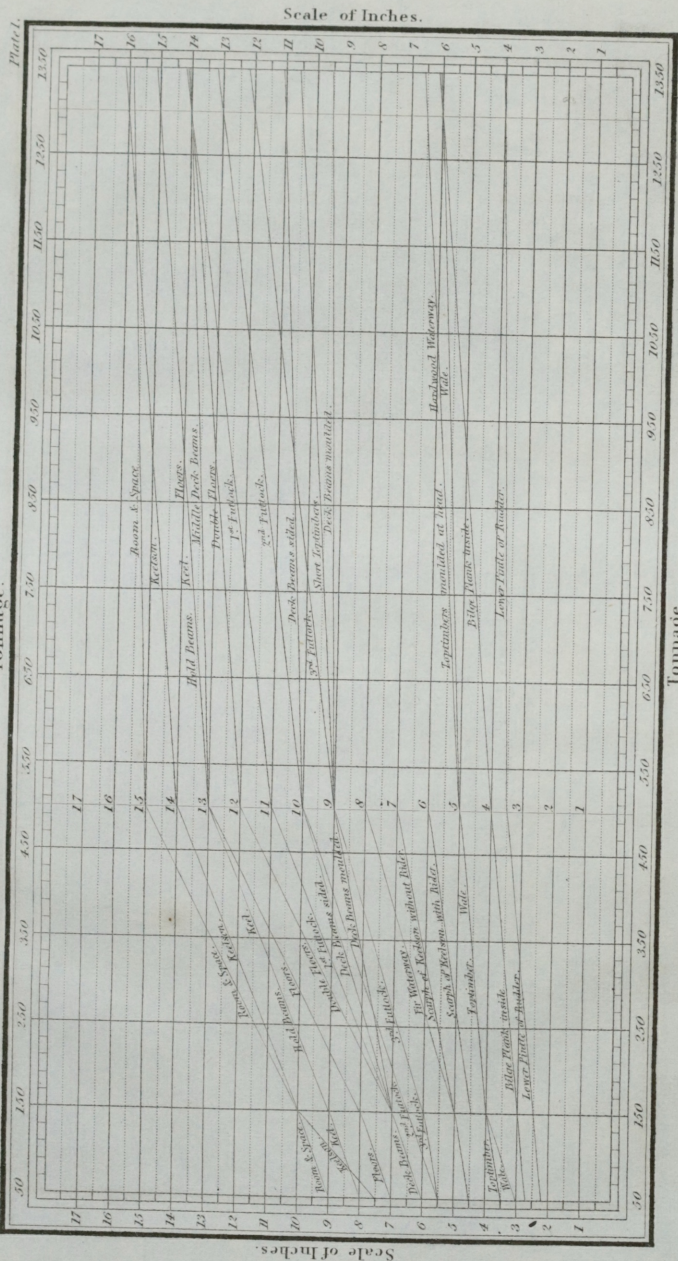
By Order of the Committee,

CHARLES GRAHAM,

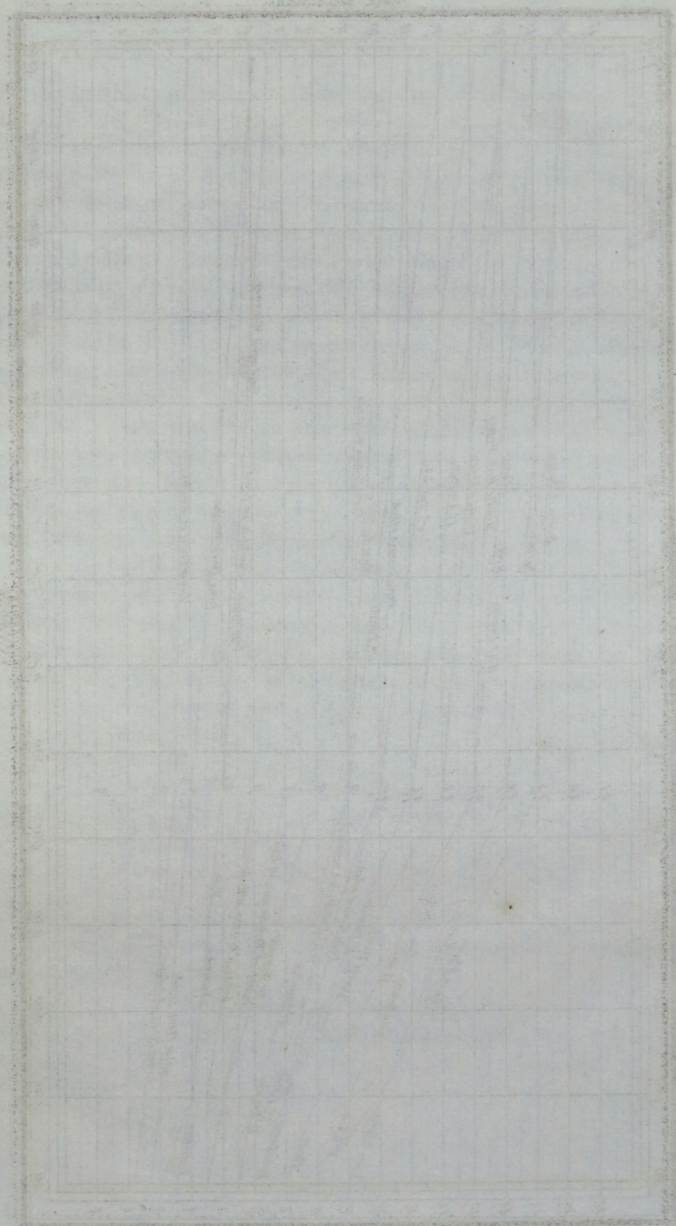
Secretary.

No. 2, White Lion Court, Cornhill,
London, 1st July, 1849.

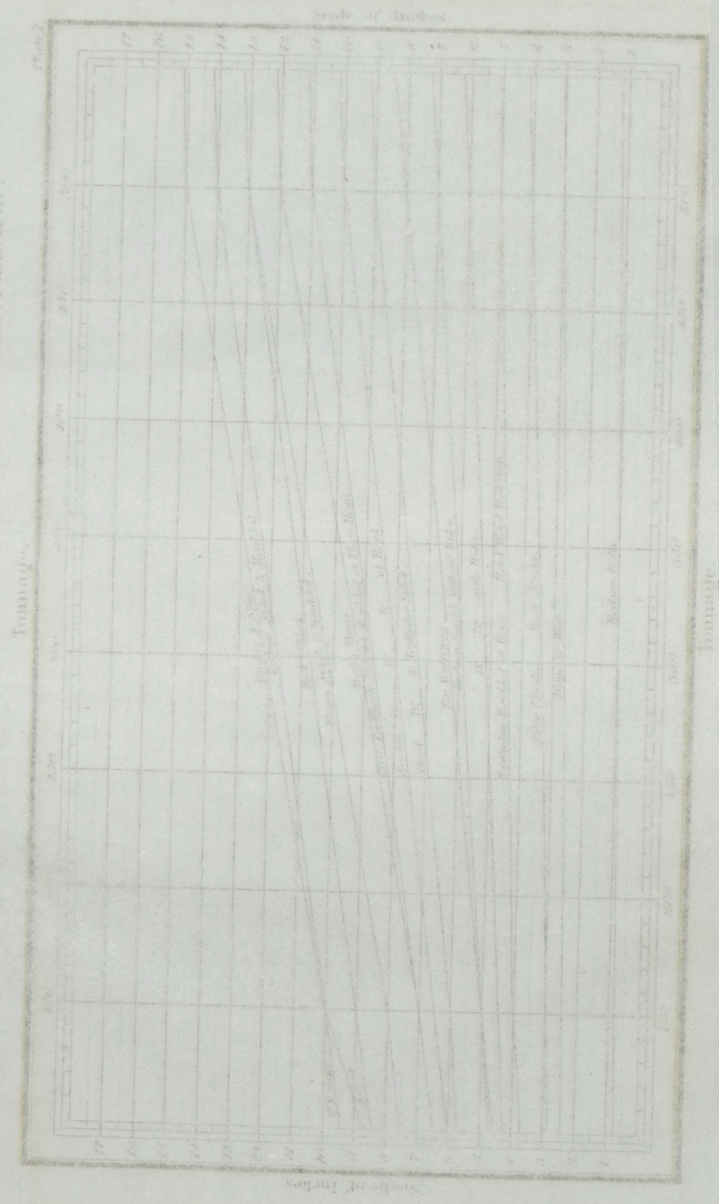
Tonnage.



33. Set off the Number of Inches given in the Rules for Ships for 50 Tons, 150 Tons, 300 Tons, & 1300 Tons, on their respective perpendiculars — then a line drawn through these points, will shew on the intermediate perpendiculars the proportionate dimensions of the corresponding Timbers, Planks &c.



STATE OF NEW YORK, SENATE, JANUARY 1891.



so, set at the Number of Inches given in the Rules for Ships of 170 Tons, and of 500 Tons, on their respective perpendiculars — then a line drawn through those two points, will shew, on the intermediate perpendiculars, the proper dimensions of the corresponding Timbers, Planks, &c.

1. The first part of the book is a general introduction to the subject of the history of the world, and is divided into two parts, the first of which is a general introduction to the subject of the history of the world, and the second of which is a general introduction to the subject of the history of the world.

2. The second part of the book is a general introduction to the subject of the history of the world, and is divided into two parts, the first of which is a general introduction to the subject of the history of the world, and the second of which is a general introduction to the subject of the history of the world.

3. The third part of the book is a general introduction to the subject of the history of the world, and is divided into two parts, the first of which is a general introduction to the subject of the history of the world, and the second of which is a general introduction to the subject of the history of the world.

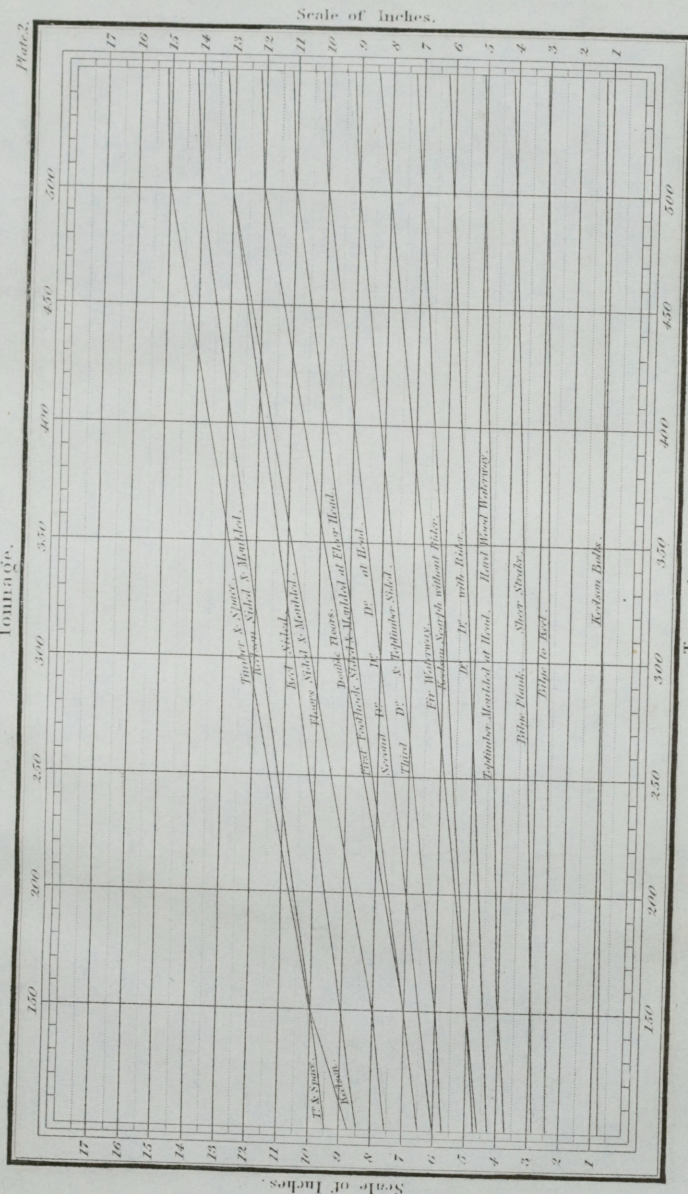
4. The fourth part of the book is a general introduction to the subject of the history of the world, and is divided into two parts, the first of which is a general introduction to the subject of the history of the world, and the second of which is a general introduction to the subject of the history of the world.

5. The fifth part of the book is a general introduction to the subject of the history of the world, and is divided into two parts, the first of which is a general introduction to the subject of the history of the world, and the second of which is a general introduction to the subject of the history of the world.

SCALE for ascertaining the proportionate dimensions of TIMBER, PLANK &c.

Tonnage.

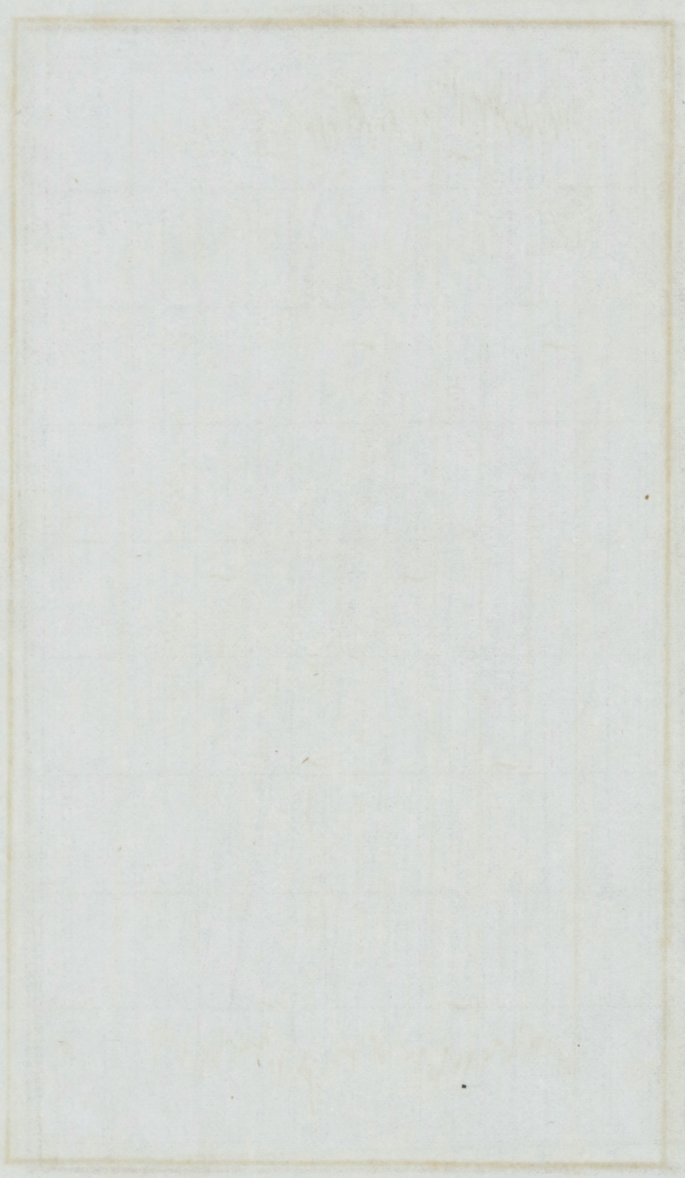
Plate 2.



Tonnage.

NB. Set off the Number of Inches given in the Rules for Ships of 150 Tons, and of 500 Tons, on their respective perpendiculars — then a line drawn through those two points, will shew, on the intermediate perpendiculars, the proper dimensions of the corresponding Timbers, Planks, &c.

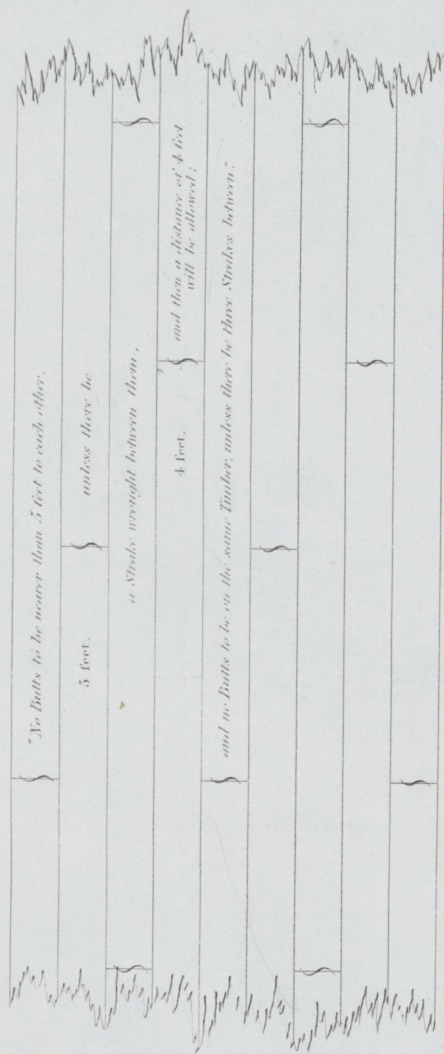
THE UNIVERSITY OF CHICAGO PRESS



THE UNIVERSITY OF CHICAGO PRESS
1960

SKETCH DESCRIPTIVE OF THE REQUIRED SHIFTING OF PLANK—Section 45.

Plate 3.



The Sketch shows the principle on which the Butts should be arranged, so as to avoid Stepping, which is deemed bad Workmanship.

The above profile was taken from the top of the hill, looking north, and is a true representation of the same.



Gravelly sandstone, 10 feet thick, at base of hill, looking north, and is a true representation of the same.

SIZES OF BOLTS.—Section 46, Page 14.

TONNAGE	50	100	150	200	250	300	350	400	450	500
Heel Knee and Deadwood	$\frac{7}{8}$	$\frac{1\frac{5}{8}}{1\frac{5}{8}}$	1	1	$1\frac{1}{16}$	$1\frac{1}{8}$	$1\frac{1}{8}$	$1\frac{3}{16}$	$1\frac{1}{4}$	$1\frac{1}{4}$
Scarphs of Keel and Arms of Breasthooks	$\frac{5}{8}$	$\frac{1}{16}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{1\frac{3}{8}}{1\frac{3}{8}}$	$\frac{7}{8}$	$\frac{7}{8}$	$\frac{1\frac{5}{8}}{1\frac{5}{8}}$	$\frac{1\frac{5}{8}}{1\frac{5}{8}}$	1
Kelson, Hold Beam, Transoms and Breasthooks	$\frac{3}{4}$	$\frac{1\frac{3}{8}}{1\frac{3}{8}}$	$\frac{7}{8}$	$\frac{7}{8}$	$\frac{1\frac{5}{8}}{1\frac{5}{8}}$	1	1	$1\frac{1}{16}$	$1\frac{1}{8}$	$1\frac{1}{8}$
Bilge and Limber Strakes	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{1\frac{3}{8}}{1\frac{3}{8}}$	$\frac{1\frac{3}{8}}{1\frac{3}{8}}$	$\frac{7}{8}$
Butt Bolts	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$
Deck Beam Bolts	$\frac{1}{16}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{1\frac{3}{8}}{1\frac{3}{8}}$	$\frac{1\frac{3}{8}}{1\frac{3}{8}}$	$\frac{1\frac{3}{8}}{1\frac{3}{8}}$	$\frac{7}{8}$	$\frac{7}{8}$	$\frac{7}{8}$
Lower Pintle of Rudder	$2\frac{1}{4}$	$2\frac{3}{8}$	$2\frac{1}{2}$	$2\frac{5}{8}$	$2\frac{3}{4}$	$2\frac{1\frac{5}{8}}{1\frac{5}{8}}$	$3\frac{1}{8}$	$3\frac{1}{4}$	$3\frac{3}{8}$	$3\frac{1}{2}$

Note.—The in and out Bolts of all Material Fastenings must be through and clenched.

NUMBER OF HANGING KNEES.—Section 41, Page 11.

TONNAGE	200	250	300	350	400	450	500	550	600	650	700	750	800
No. of Knees to Hold Beams .. Pairs	—	—	—	—	8	—	9	—	10	—	11	—	12
Ditto to Upper Deck Beams .. Pairs	6	7	8	9	10	11	12	13	14	15	16	17	18

No. 1.—A TABLE exhibiting the different Descriptions of TIMBER, of good
to the several Terms of Years appointed for Ships

<i>Parts of the Frame of a Vessel.</i>	CLASS <i>Twelve Years.</i>	CLASS <i>Ten Years.</i>	CLASS <i>Nine Years.</i>	CLASS <i>Eight Years.</i>
*FLOORS	English } Oak African } Live } East-India Teak Morung Saul Greenheart Morra.	The same as in the preceding Class, and admit Live Oak and Red Cedar alternately Adriatic } Oak Spanish } French } South American, } Hard or } Wood New South Wales } Mahogany.	The same as in the preceding Class, and admit Other Foreign White Oak Red Cedar Spanish Chesnut.	The same as in the preceding Class.
1st FUTTOCKS }	English } Oak African } Live } East-India Teak Morung Saul Greenheart Morra.	The same as in the preceding Class, and admit Live Oak and Red Cedar alternately Adriatic } Oak Spanish } French } South American Hard Wood Mahogany.	The same as in the preceding Class, and admit Other Foreign White Oak below the light water mark Red Cedar Spanish Chesnut.	The same as in the preceding Class.
2d FUTTOCKS.. }	English } Oak African } Live } East-India Teak Morung Saul Greenheart Morra.	The same as in the preceding Class, and admit Live Oak and Red Cedar alternately Mahogany.	The same as in the preceding Class, and admit Adriatic } Oak Spanish } French } South American Hard Wood Red Cedar.	The same as in the preceding Class.
3d FUTTOCKS.. and TOP TIMBERS }	English } Oak African } Live } East-India Teak Morung Saul Greenheart Morra. Mahogany, except for Roughtree Stantions.	The same as in the preceding Class, and admit Live Oak and Red Cedar alternately Mahogany.	The same as in the preceding Class, and admit Adriatic } Oak Spanish } French } South American, } Hard or } Wood New South Wales, } Red Cedar.	The same as in the preceding Class.
STEM STERN POST.. }	English } Oak African } Live } East-India Teak Morung Saul.	The same as in the preceding Class, and admit Mahogany.	The same as in the preceding Class, and admit Adriatic } Oak Spanish } French } South American Hard Wood Red Cedar.	The same as in the preceding Class.
TRANSOMS.... KNIGHTHEADS HAWSE TIM- BERS..... APRON ‡DEADWOOD .. }	English } Oak African } Live } East-India Teak Morung Saul.	The same as in the preceding Class, and admit Mahogany.	The same as in the preceding Class, and admit Adriatic } Oak Spanish } French } South American Hard Wood Red Cedar.	The same as in the preceding Class.
MAIN KELSON }	English } Oak African } Live } East India Teak Morung Saul Greenheart Morra Mahogany.	The same as in the preceding Class, and admit Adriatic } Oak Spanish } French } South American, } Hard or } Wood New South Wales, } Red Cedar.	The same as in the preceding Class, and admit Other Foreign White Oak Spanish Chesnut.	The same as in the preceding Class.
BEAMS HOOKS and KNEES..... }	English } Oak African } Live } East-India Teak Morung Saul Greenheart Morra Mahogany.	The same as in the preceding Class, and admit Adriatic } Oak Spanish } French } South American Hard Wood New South } Wales ditto } for Beams Red Cedar. } only.	The same as in the preceding Class.	The same as in the preceding Class, and admit Other Foreign White Oak Spanish Chesnut.

* Black Birch, Larch, Hackmatack, Tamarac, Juniper, Witch Hazel, American Rock Elm, and Cowdie allowed for Floors
† Black Birch allowed for First Futtocks amidships, to the same extent in Ships of the Six Years' Class.
‡ So far as regards the Material to be used from the height of two feet above the rabbet of the keel.

Quality, to be used in the TIMBERING of SHIPS, as the same will be applicable to remain on the First Description of the First Class.

CLASS Seven Years.	CLASS Six Years.	CLASS Five Years.	CLASS Four Years.	Parts of the Frame of a Vessel.
The same as in the preceding Class, and admit English Ash Sound second-hand English or African Oak, or Teak.	The same as in the preceding Class, and admit Larch Hackmatack Tamarac Juniper Cowdie.	The same as in the preceding Class, and admit Baltic Fir Red Pine Black Birch Witch Hazel Elm or Ash Hard Wood of good quality English Beech.	The same as in the preceding Class, and admit White Spruce.	*FLOORS.
The same as in the preceding Class, and admit Other Foreign White Oak above the light water mark Sound second-hand English or African Oak, or Teak.	The same as in the preceding Class, and admit English Ash Larch Hackmatack Tamarac Juniper Cowdie.	The same as in the preceding Class, and admit Baltic Fir Red Pine Black Birch Witch Hazel Elm or Ash Hard Wood of good quality.	The same as in the preceding Class, and admit White Spruce. English Beech.	†1st FUTTOCKS.
The same as in the preceding Class, and admit Other Foreign White Oak Spanish Chesnut.	The same as in the preceding Class, and admit Larch—Cowdie Hackmatack Tamarac—Juniper Sound second-hand English or African Oak, or Teak.	The same as in the preceding Class, and admit Baltic Fir Red Pine.	The same as in the preceding Class, and admit Elm Ash Black Birch Witch Hazel White Spruce.	2d FUTTOCKS.
The same as in the preceding Class, and admit Other Foreign White Oak Spanish Chesnut.	The same as in the preceding Class, and admit Red Pine—Baltic Fir Larch—Hackmatack Tamarac—Juniper Pitch Pine—Cowdie Sound second-hand English or African Oak, or Teak.	The same as in the preceding Class.	The same as in the preceding Class, and admit Yellow Pine Elm Ash Black Birch Witch Hazel White Spruce.	3d FUTTOCKS. and TOP TIMBERS.
The same as in the preceding Class, and admit Other Foreign White Oak Spanish Chesnut.	The same as in the preceding Class, and admit Larch Hackmatack Tamarac Juniper Cowdie.	The same as in the preceding Class.	The same as in the preceding Class, and admit Black Birch Witch Hazel.	STEM. STERN POST.
The same as in the preceding Class, and admit Other Foreign White Oak Spanish Chesnut.	The same as in the preceding Class, and admit Larch—Cowdie Hackmatack Tamarac—Juniper Sound second-hand English or African Oak, or Teak.	The same as in the preceding Class, and admit Baltic Fir Red Pine.	The same as in the preceding Class, and admit Yellow Pine Elm Ash Black Birch Witch Hazel White Spruce.	TRANSOMS KNIGHTHEADS HAWSE TIMBERS APRON ‡DEADWOOD.
The same as in the preceding Class, and admit Pitch Pine Larch Hackmatack Tamarac Juniper Cowdie.	The same as in the preceding Class, and admit Baltic Fir Red Pine American Rock Elm.	The same as in the preceding Class, and admit Ash.	The same as in the preceding Class, and admit Yellow Pine Black Birch Witch Hazel White Spruce.	MAIN KELSON.
The same as in the preceding Class, and admit Pitch Pine Larch Hackmatack Tamarac Juniper—Cowdie Knees of Fir, Pine, or Spruce.	The same as in the preceding Class, and admit Baltic Fir Red Pine Sound second-hand English or African Oak, or Teak.	The same as in the preceding Class, and admit Elm Ash.	The same as in the preceding Class, and admit Yellow Pine Black Birch Witch Hazel White Spruce.	BEAMS HOOKS and KNEES.

in Midships, to an extent not exceeding one-half the entire length of the Keel, in Ships of the Seven Years' Class.

MEM.—For relaxation in favour of Steam Vessels, *vide* Rules, page 24.

No. 2.—A TABLE exhibiting the different Descriptions of TIMBER, of good
applicable to the several Terms of Years appointed for

Parts of the Outside of a Vessel.	CLASS Twelve Years.	CLASS Ten Years.	CLASS Nine Years.	CLASS Eight Years.
KEEL to the 1st FUTTOCK HEADS.....	English } Oak African } Live } East-India Teak Red Cedar Foreign White Oak Elm Beech South American, or any Hard Wood Mahogany Spanish Chesnut	The same as in the pre- ceding Class, and admit Pitch Pine Larch Hackmatack Tamarac Juniper Black Birch Cowdie.	The same as in the pre- ceding Class, and admit Baltic Fir Red Pine.	The same as in the pre- ceding Class.
1st FUTTOCK HEADS to LIGHT WATER MARK	English } Oak African } Live } East-India Teak Red Cedar Foreign White Oak South American, } Hard or } Wood New South Wales } Mahogany Spanish Chesnut	The same as in the pre- ceding Class, and admit Pitch Pine.	The same as in the pre- ceding Class, and admit Baltic Fir Red Pine Larch Hackmatack Tamarac Juniper Cowdie.	The same as in the pre- ceding Class, and admit *American Rock Elm.
LIGHT WATER MARK to WALES	English } Oak African } Live } East-India Teak Morung Saul Red Cedar Greenheart Morra Mahogany.	The same as in the pre- ceding Class, and admit Adriatic } Oak Spanish } French } South American, } Hard or } Wood New South Wales }	The same as in the pre- ceding Class, and admit Foreign White Oak Pitch Pine Spanish Chesnut.	The same as in the pre- ceding Class, and admit Baltic Fir Red Pine Larch Hackmatack Tamarac Juniper Cowdie.
WALES and BLACKSTRAKES	English } Oak African } Live } East-India Teak Greenheart Morra Morung Saul.	The same as in the pre- ceding Class, and admit Red Cedar Mahogany.	The same as in the pre- ceding Class, and admit Adriatic } Oak Spanish } French } South American, } Hard or } Wood New South Wales }	The same as in the pre- ceding Class, and admit Other Foreign White Oak Pitch Pine Spanish Chesnut.
TOPSIDES.....	English } Oak African } Live } East-India Teak Red Cedar Greenheart Morra Morung Saul Mahogany.	The same as in the pre- ceding Class, and admit Pitch Pine.	The same as in the pre- ceding Class, and admit Adriatic } Oak Spanish } French } South American, } Hard or } Wood New South Wales }	The same as in the pre- ceding Class, and admit Other Foreign White Oak Spanish Chesnut.
SHEERSTRAKES and PLANKSHEER..	English } Oak African } Live } East-India Teak Greenheart Morra Morung Saul.	The same as in the pre- ceding Class, and admit Red Cedar Mahogany.	The same as in the pre- ceding Class, and admit Adriatic } Oak Spanish } French } South American, } Hard or } Wood New South Wales }	The same as in the pre- ceding Class, and admit Other Foreign White Oak Spanish Chesnut.
WATERWAYS.	English } Oak African } Live } East-India Teak Red Cedar Greenheart Morra Morung Saul Mahogany.	The same as in the pre- ceding Class, and admit South American, } Hard or } Wood New South Wales }	The same as in the pre- ceding Class.	The same as in the pre- ceding Class, and admit Foreign White Oak Spanish Chesnut.

* The use of Elm to be restricted to a height from the lower part of the main Keel, of one third of the internal depth of the Ship measured from the top of the Limber Strake to the top of the Upper Deck Beams in midships.

Quality, to be used in the OUTSIDE PLANKING of SHIPS, as the same will be Ships to remain on the First Description of the First Class.

CLASS Seven Years.	CLASS Six Years.	CLASS Five Years.	CLASS Four Years.	Parts of the Outside of a Vessel.
The same as in the preceding Class.	The same as in the preceding Class.	The same as in the preceding Class, and admit Yellow Pine White Spruce,	The same as in the preceding Class.	<div> <div>KEEL</div> <div>to the</div> <div>1st FUTTOCK HEADS.</div> </div>
The same as in the preceding Class.	The same as in the preceding Class.	The same as in the preceding Class, and admit Yellow Pine Black Birch.	The same as in the preceding Class, and admit White Spruce.	
The same as in the preceding Class.	The same as in the preceding Class.	The same as in the preceding Class, and admit Yellow Pine.	The same as in the preceding Class, and admit White Spruce Black Birch.	<div>1st FUTTOCK HEADS</div> <div>to</div> <div>LIGHT WATER MARK.</div>
The same as in the preceding Class.	The same as in the preceding Class, and admit *American Rock Elm.	The same as in the preceding Class, and admit Yellow Pine.	The same as in the preceding Class, and admit White Spruce Black Birch.	<div>LIGHT WATER MARK</div> <div>to</div> <div>WALES.</div>
The same as in the preceding Class, and admit Baltic Fir Red Pine Larch Hackmatack Tamarac Juniper Cowdie.	The same as in the preceding Class.	The same as in the preceding Class, and admit Yellow Pine *American Rock Elm.	The same as in the preceding Class, and admit White Spruce Black Birch.	<div>WALES</div> <div>and</div> <div>BLACKSTRAKES</div>
The same as in the preceding Class, and admit Baltic Fir Red Pine Larch Hackmatack Tamarac Juniper Cowdie.	The same as in the preceding Class.	The same as in the preceding Class, and admit Yellow Pine *American Rock Elm.	The same as in the preceding Class, and admit White Spruce Black Birch.	
The same as in the preceding Class, and admit Larch Pitch Pine Hackmatack Tamarac Juniper Cowdie.	The same as in the preceding Class, and admit Baltic Fir Red Pine.	The same as in the preceding Class, and admit *American Rock Elm.	The same as in the preceding Class, and admit White Spruce Yellow Pine Black Birch.	<div>TOPSIDES.</div>
The same as in the preceding Class, and admit Yellow Pine for the upper deck, provided it has no in and out through fastenings, and the beams are otherwise well secured.	The same as in the preceding Class.	The same as in the preceding Class, and admit Yellow Pine *American Rock Elm.	The same as in the preceding Class, and admit White Spruce Black Birch.	<div>SHEERSTRAKES</div> <div>and</div> <div>PLANKSHEER.</div>
				<div>WATERWAYS.</div>

No. 3.—A TABLE exhibiting the different Descriptions of TIMBER, of good applicable to the several Terms of Years for

<i>Parts of the Inside of a Vessel.</i>	CLASS <i>Twelve Years.</i>	CLASS <i>Ten Years.</i>	CLASS <i>Nine Years.</i>	CLASS <i>Eight Years.</i>
LIMBER STRAKE	English } African } Oak Adriatic } Spanish } French } East-India Teak } Morung Saul } Red Cedar } South American, } or } New South Wales } Hard Mahogany. } Wood	The same as in the preceding Class, and admit Other Foreign White Oak Spanish Chesnut.	The same as in the preceding Class.	The same as in the preceding Class, and admit Pitch Pine.
BILGE PLANKS	English } African } Oak Adriatic } Spanish } French } East-India Teak } Morung Saul } Red Cedar } South American, } or } New South Wales } Hard Mahogany. } Wood	The same as in the preceding Class, and admit Other Foreign White Oak Spanish Chesnut.	The same as in the preceding Class.	The same as in the preceding Class, and admit Pitch Pine.
CEILING. LOWER HOLD.	English } African } Oak Adriatic } Spanish } French } East-India Teak } Morung Saul } Red Cedar } South American, } or } New South Wales } Hard Mahogany. } Wood	The same as in the preceding Class, and admit Other Foreign White Oak Spanish Chesnut.	The same as in the preceding Class.	The same as in the preceding Class, and admit Pitch Pine Baltic Fir Red Pine Larch Hackmatack Tamarac Juniper Cowdie,
BETWEEN DECKS.	English } African } Oak Adriatic } Spanish } French } East-India Teak } Morung Saul } Red Cedar } South American, } or } New South Wales } Hard Mahogany. } Wood	The same as in the preceding Class, and admit Other Foreign White Oak Pitch Pine Spanish Chesnut.	The same as in the preceding Class.	The same as in the preceding Class, and admit Baltic Fir Red Pine Larch Hackmatack Tamarac Juniper Cowdie.
SHELF PIECES	English } Oak African } East-India Teak } Morung Saul } Red Cedar } Greenheart } Morra } Mahogany. }	The same as in the preceding Class, and admit Foreign White Oak Adriatic } Oak Spanish } French } South American, } or } New South Wales } Hard Spanish Chesnut. } Wood	The same as in the preceding Class.	The same as in the preceding Class.
CLAMPS	English } Oak African } East-India Teak } Morung Saul } Red Cedar } Greenheart } Morra } Mahogany. }	The same as in the preceding Class, and admit Foreign White Oak Adriatic } Oak Spanish } French } South American, } or } New South Wales } Hard Spanish Chesnut. } Wood	The same as in the preceding Class.	The same as in the preceding Class, and admit Pitch Pine Larch Hackmatack Tamarac Juniper Cowdie.

Quality, to be used in the **INSIDE PLANKING** of **SHIPS**, as the same will be
 Ships to remain on the **First Description** of the **First Class**.

CLASS Seven Years.	CLASS Six Years.	CLASS Five Years.	CLASS Four Years.	Parts of the Inside of a Vessel.
The same as in the preceding Class, and admit Baltic Fir Red Pine Larch Hackmatack Tamarac Juniper Cowdie.	The same as in the preceding Class, and admit American Rock Elm.	The same as in the preceding Class, and admit Yellow Pine Black Birch.	The same as in the preceding Class, and admit White Spruce.	<div> <div></div> <div>LIMBER STRAKE.</div> </div>
The same as in the preceding Class, and admit Baltic Fir Red Pine Larch Hackmatack Tamarac Juniper Cowdie.	The same as in the preceding Class, and admit American Rock Elm.	The same as in the preceding Class, and admit Yellow Pine Black Birch.	The same as in the preceding Class, and admit White Spruce.	
The same as in the preceding Class.	The same as in the preceding Class, and admit American Rock Elm.	The same as in the preceding Class, and admit Yellow Pine Black Birch.	The same as in the preceding Class, and admit White Spruce.	<div> <div></div> <div>BILGE PLANKS.</div> </div>
The same as in the preceding Class.	The same as in the preceding Class, and admit American Rock Elm.	The same as in the preceding Class, and admit Yellow Pine Black Birch.	The same as in the preceding Class, and admit White Spruce.	
The same as in the preceding Class.	The same as in the preceding Class, and admit American Rock Elm.	The same as in the preceding Class, and admit Yellow Pine Black Birch.	The same as in the preceding Class, and admit White Spruce.	<div> <div></div> <div>LOWER HOLD.</div> </div>
The same as in the preceding Class.	The same as in the preceding Class, and admit American Rock Elm.	The same as in the preceding Class, and admit Yellow Pine Black Birch.	The same as in the preceding Class, and admit White Spruce.	
The same as in the preceding Class, and admit Pitch Pine Larch Hackmatack Tamarac Juniper Cowdie.	The same as in the preceding Class, and admit Baltic Fir Red Pine American Rock Elm.	The same as in the preceding Class, and admit Yellow Pine.	The same as in the preceding Class, and admit White Spruce Black Birch.	<div> <div></div> <div>BETWEEN DECKS.</div> </div>
The same as in the preceding Class, and admit Baltic Fir Red Pine.	The same as in the preceding Class, and admit American Rock Elm.	The same as in the preceding Class, and admit Yellow Pine.	The same as in the preceding Class, and admit White Spruce Black Birch.	
				<div> <div></div> <div>CEILING.</div> </div>
				<div> <div></div> <div>SHELF PIECES.</div> </div>
				<div> <div></div> <div>CLAMPS.</div> </div>

No. 4.

FORM OF THE REPORT OF SURVEY.

No..... Survey held at..... Date..... 18 on the Master.....
 Tonnage Built at When built By whom built..... Owners.....
 Port belonging to Destined Voyage If Surveyed Afloat or in Dry Dock

Feet.		Inches.		Feet.		Inches.		Feet.		Inches.	
Length aloft				Extreme Breadth				Depth of Hold.			

SCANTLINGS OF TIMBER.

THICKNESS OF PLANK.

	Inch.	Inch. Midd.	Inch. Ends	THICKNESS OF PLANK.		Inch.	Inch
				OUTSIDE.		INSIDE.	
Room and Space				Keel to Bilge		Foot Waling	
Floors.....sided		Moulded		Bilge Planks		Bilge Planks	
1st Foothooks				Bilge to Wales.....		Ceiling in Flat.....	
2d Ditto				Wales		Ditto Bilge to Clamp	
3d Ditto				Topsides		Hold Beam Clamps..	
Top Timbers				Sheerstrakes		Deck Beam Ditto ...	
Deck Beams No. of ...				Plankshears		Ceiling 'twixt Decks	
Hold Beams No. of ...				Waterways		Hold Beam Shelves ..	
Keel				Upper Deck		Deck Beam ditto.....	
Kelsons							

SIZE OF BOLTS IN FASTENINGS.

COPPER OR IRON.		COPPER OR IRON.		IRON.	
	Inch.		Inch.		Inch.
Heel-Knee and Deadwood abaft		Bolts through the Bilge and Limber Strakes		Hold Beam.....	
Scarphs of Keel No.....		Butt End Bolts		Deck Beam.....	
Floor Timber Bolts		Lower Pintle of the Rudder			
Kelson ditto ..					
Transoms and throats of Hooks					
Arms of Hooks					

TIMBERING.—The Space between the Floor Timbers and Lower Foothooks in this Vessel isInches...The Space between the Top Timbers is.....Inches. The Stem, Stern-Post are composed of, the Transoms, Aprons, Knightheads, Hawse Timbers, ofand are.....free from all defects.

The Floors and First Foothooks are composed of Timber.

The other Foothooks and Top Timbers of.....

The Shifts of the first and second Foothooks are not less than

[N.B. When less than prescribed by the Rule, state how many.]

The rest of the Shifts of the Frames are

The Frame is squared from the first Foothook Heads upwards, and free from sap, and from thence downwards the Frame is

The alternate Frames arebolted together. [N.B. If not, state how bolted.]

The Butts of the Timbers are.....close together; their thickness not less than.....of the entire moulding at that place.

The frame is.....chocked with.....Butt at each end of the chock.

The Main Kelson is composed of.....and the False Kelson of.....

The Scarphs of the Kelsons are not less than feet inches.

The Deck and Hold Beams are composed of

PLANKING OUTSIDE.—From the Keel to the first Foothook Heads, the Plank is composed of *

From the first Foothook Heads to the Light Water Mark, of

From the Light Water Mark to the Wales, of

The Wales and Blackstrakes are of The Topsides of

The Shearstrakes and Plankshears of The Waterways of

The Decks of State of

The Shifts of the Planking are not less than feet inches. [*N.B.—If less than prescribed by the Rule, state whether general or partial, and if partial, in what part of the Ship.*]

The Planking is wrought between.

PLANKING INSIDE.—The Limber-strakes are composed of the Bilge Planks of

The Ceiling, Lower Hold, of Between Decks, of Shelf Pieces of

Clamps of

FASTENINGS.—To Hold Beams

Deck Beams

Number of Breasthooks Pointers Crutches

Butts End Bolts are of in the Bottom, and Bolt in each Butt End through and clenched.

Bilge Bolts are of bolted through and clenched Treenails of

General Quality of Workmanship

We certify that the preceding is a correct description of the above-named Vessel.

Builder's Signature

Surveyor's Signature

Her Masts, Yards, &c. are in condition and sufficient in size and length.

She has SAILS.

CABLES, &c.

ANCHORS,

No.	Fathoms.	Inches.	No.	and their Weights.
Fore Sails,	Chain			Bower,
Fore Top Sails,	Hempen Stream Cable			Stream,
Fore Topmast Stay Sails,	Hawser			Kedge,
Main Sails,	Towlines.....			
Main Top Sails,	Warp			
	All of quality			

and.

Her Standing and Running Rigging sufficient in size and in quality.

She has Long Boat and The present state of the Windlass is

Capstan and Rudder

General Remarks.—Statement and Date of Repairs.

If Sheathed, Doubled, Felted, or Coppered When last done

I am of opinion this Vessel should be classed

The Amount of the Fee£ : : is received by me,

Special£ : :

Certificate (if required)

Committee's Minute 18.....

Character assigned.....

* To be varied as regards the use of Elm in conformity with the amended rule.

FORM OF REPORT OF ANNUAL SURVEY.

No..... Survey held at Date 18 on the
 Master..... Tonnage..... Built at When built..... By whom
 built..... Owners..... Port belonging to..... Destined
 Voyage..... If Surveyed Afloat or in Dry Dock.....

Last Survey, No..... Port of Classed.....

The present condition of the

Decks	Plank (Bottom) & Counter.	Copper
Waterways	Treenails.....	Windlass and Capstan
Comings	Breasthooks and Stemson...	Pumps.....
Upper Deck Beams and	Transoms, Pointers, and	Boats
Fastenings	Crutches	Masts, Yards, &c.
Lower Deck Beams and	Timbers of the Frame	Sails.....
Fastenings	Kelsons	Anchors, No. of.....
Planksheers	Clamps and Shelves.....	Cables
Sheerstrakes	Ceiling.....	Hawsers and Warps
Topsides	Rudder	Standing & Running Rigging
Wales		

General Observations and Opinion,

Committee Minute..... 18

Character assigned.....

Certificate (if required)

FORM OF CERTIFICATE OF CLASSIFICATION.

Lloyd's Register of British and Foreign Shipping.

ESTABLISHED 1834.



No....

London,

18

OFFICE, No. 2, White Lion Court, Cornhill.

These are to Certify, That the of
 Master, Tons, bound to, has been
 Surveyed by the Surveyors to this Society, and reported to be, on the

..... her intended Voyage, and that she has been CLASSED in the REGISTER
 BOOK of this Society on the List of Ships of the.....

Witness my Hand,

Charge s.

..... Chairman.

....., Secretary.

FORM OF CERTIFICATE FOR VESSELS NAVIGATED BY STEAM.

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

Certificate for Vessels navigated by Steam.

_____ Day of _____, _____ 18

_____ do certify that the whole of the Boilers and machinery of the
 Steam Vessel _____ belonging to _____, whereof _____
 is Master, _____ Tons, have been carefully inspected and examined by _____
 at _____, and that _____ find the same to be at this time in good
 order and safe working condition.

Witness _____

Manufacturing Engineer.

The following is a true Account of the Particulars of the machinery of the
 Steam Vessel _____ above named :

ENGINES.

Number
 Diameter of Cylinder
 Length of Stroke
 No. per Minute.
 Estimated Power
 Diameter of Paddle-wheels ...
 Length of Paddles
 Breadth of Paddles
 No. of Paddles
 On what motion
 No. of revolutions per minute ..
 Size of the holding-down bolts ..
 Condition of ditto
 Maker of the Engines
 Age of the Engines
 When they were last taken out
 Present condition of the Engines
 Can injection water be taken
 from the Bilge in the event of
 a serious Leak

FUEL.

Where stowed
 If in contact with boiler
 If not, what space between Coal
 Boxes and Boiler
 For what quantity room is pro-
 vided
 If liable to get wetted.....

BOILERS.

Whether iron or copper
 Working pressure
 If it can be increased without
 going into the Boiler
 What are the means of changing
 the water while the Boilers are
 at work
 Maker of the Boilers
 Age of the Boilers
 When they were last taken out
 Present condition
 Number of feed pumps
 How attached
 What clear space upon the top-
 side of the boiler from wood-
 work
 Do. at the end from ditto
 Do. round the chimney from do

PUMPS.

No. of hand pumps
 Can they be worked by the En-
 gine
 If any attached to engine, their
 purpose and size
 No. of force-pumps
 No. of branches and hose of
 sufficient length to reach to
 every part of the vessel.....

Manufacturing Engineer.

NAMES of the SURVEYORS, and the PORTS to which they have
been appointed.

The Surveyors at the following Ports are exclusively the Officers of the Society,
and are not permitted to engage in any other business or employment whatsoever.

LONDON ... ..	...	Augustin F. B. Creuze, F.R.S., Principal Shipwright Surveyor. Peter Courtenay. James Martin. Nathaniel Middleton. Joseph Horatio Ritchie.
Aberdeen, with Peterhead	... ..	Thomas Alexander.
Bristol, with Chepstow, and the River	}	James Wood.
Wye		
Cork ... ..	...	Henry Adams.
Glasgow, Greenock, and the Ports in the	}	John Barr Cumming. Richard Robertson.
Clyde		
Hull, Gainsborough, Goole, Selby, Thorn, and Grimsby	}	Frederick Preston.
Leith, and Ports in the Frith of Forth, with Berwick-upon-Tweed	}	Walter Paton.
Liverpool, Chester, and River Dee	...	William Pope. George Winram. William Perkins.
Newcastle, with North and South Shields	}	Matthew Poppelwell. Robert Fowles.
Sunderland		
	...	John Brunton. Thomas Boyes Simey. Thomas Lawrence.
Whitehaven, Workington, Harrington, and Maryport, with Dumfries, Annan, and the Isle of Man	}	

The SURVEYORS at the following PORTS do not hold appointments as the exclusive Servants of the Society.

<i>Aberystwith and Aberdovey</i>	...	...	William Julian.
<i>Banff</i> ... ..	...	...	James M'Donald.
<i>Barmouth and Portmadoc</i>	...	...	John Jones.
<i>Barnstaple and Bideford</i>	...	...	James Bowen.
<i>Beaumaris and Bangor</i> ...	...	...	John Parry.
<i>Belfast</i> ... ..	...	...	George M'Kibbin.
<i>Blyth, with Hartley</i> ...	...	...	Richard Lough.
<i>Cardigan, with New Quay, Aberayron,</i> <i>and Llandewey</i>...	...	...	David James.
<i>Cork, with Cove and Kinsale</i>	...	...	George Wright.
<i>Dartmouth, with Salcombe and Brixham</i>	...	...	William Newman.
<i>Dublin, Kingstown, and Drogheda</i>	...	...	Robert Morton.
<i>Dundee and Montrose</i> ...	...	...	David Crighton.
<i>Falmouth, with Fowey and Padstow</i>	...	...	James Husband.
<i>Galway</i> ... ..	...	...	Henry Townsend.
<i>Gloucester</i> ... ..	...	...	J. G. Francillon.
<i>Guernsey</i> ... ..	...	...	Peter Collas.
<i>Ipswich and Harwich</i> ...	...	...	W. R. Mulley.
<i>Jersey</i> ... ..	...	...	William Ranwell.
<i>Limerick</i> ... ..	...	...	Malcolm Mactaggart.
<i>Londonderry</i> ... ..	...	...	James McGhee.
<i>Lynn</i> ... ..	...	...	William Garland.
<i>Milford, with Pembroke</i>...	...	...	David Vaughan.
<i>Newport, Monmouthshire, with Cardiff</i>...	...	...	Henry Haynes.
<i>Newry, Carlingford, and Dundalk</i>	...	...	Leonard Watson.
<i>Penzance, St. Ives, and Helston</i>	...	...	W. D. Mathews.
<i>Plymouth</i> ... ..	...	...	William Bennett Cuming.
<i>Poole</i> ... ..	...	...	John Oldis.
<i>Portsmouth, with Littlehampton,</i> <i>Southampton, and Cowes</i>	...	...	John Oakshott.
<i>Ramsgate and Margate</i> ...	...	...	Edward Hodges.
<i>Scarborough, with Bridlington</i>	...	...	William Wear.
<i>Scilly Isles</i> ... ..	...	...	Hugh Tregarthen.
<i>Shoreham, with Newhaven</i>	...	...	Thomas Guillaume.
<i>Sligo</i> ... ..	...	...	William Pollexfen.
<i>Stockton and Hartlepool</i>...	...	...	Ralph Hudson.
<i>Swansea, with Neath and Llanelly</i>	...	...	John Gibson.
<i>Teignmouth and Torquay</i>	...	...	Samuel Cockings.
<i>Topsham and Exeter</i> ...	...	...	John Holman.
<i>Waterford</i> ... ..	...	...	William D. Price.
<i>Wexford</i> ... ..	...	...	Mark Devereux.
<i>Weymouth, with Bridport</i>	...	...	Robert Gray.
<i>Whitby</i> ... ..	...	...	Thomas Jackson.
<i>Yarmouth</i>...	...	...	George Garson.

Printed by J. & H. COX (BROTHERS), 74 & 75, Great Queen Street,
Lincoln's-Inn-Fields,

